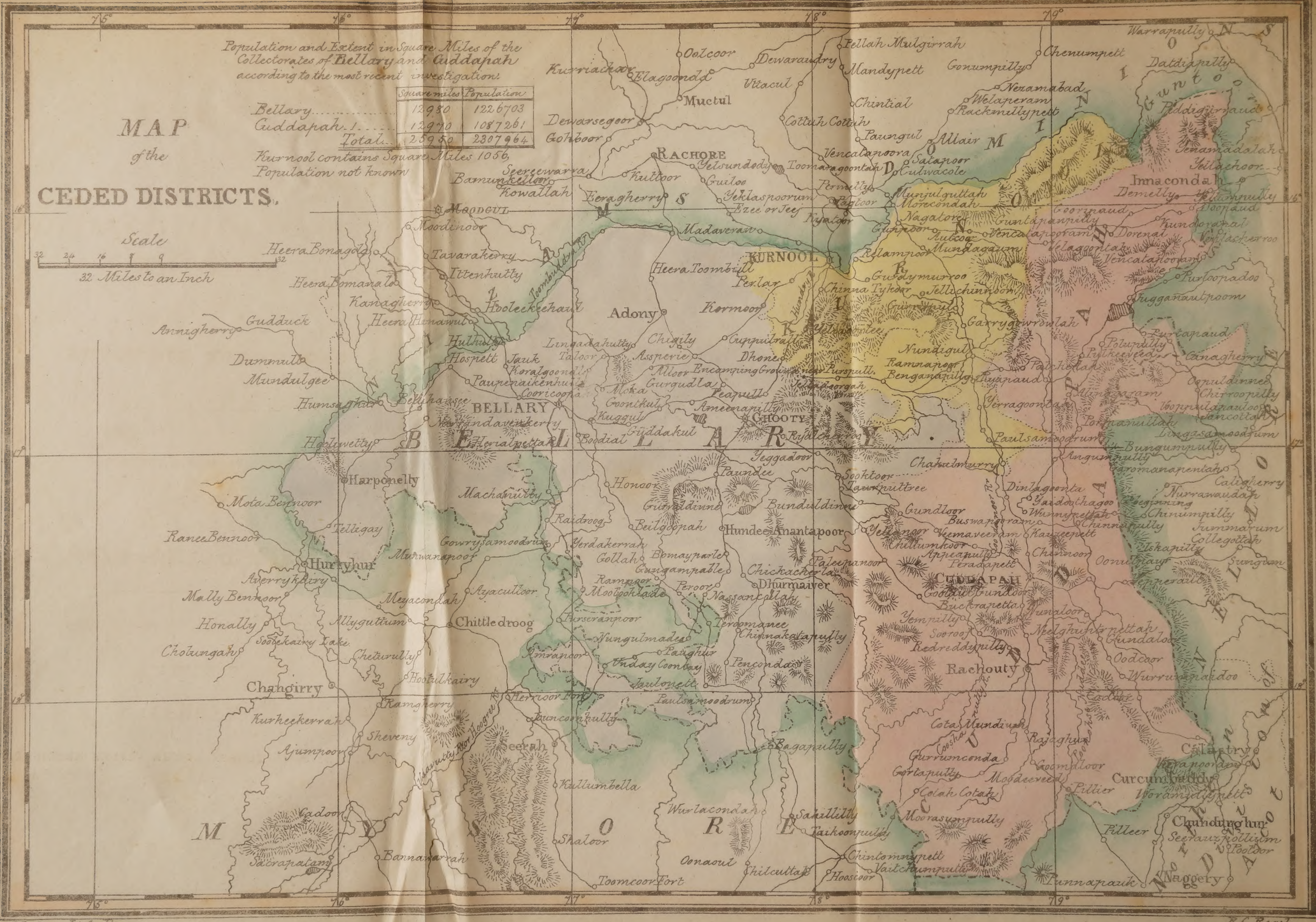
P/9

E 5 45429/B

N 6



REPORT

ON

THE MEDICAL TOPOGRAPHY AND STATISTICS

OF

THE CEDED DISTRICTS.

COMPILED FROM THE RECORDS

OF THE

MEDICAL BOARD OFFICE.

PUBLISHED BY ORDER OF GOVERNMENT.

MADRAS:

PRINTED BY R. W. THORPE, AT THE VEPERY MISSION PRESS.

1844.

22101108671

WELLCOME
LIBRARY
INSTITUTE

CEDED DISTRICTS.

CONTENTS.

	Page.
Introductory Remarks..	1
Bellary, Collectorate of..	2
„ Station of.	13
„ Jail of.	20
Tables of diseases and remarks.	22
Cuddapah, Cantonment of.	28
Tables of diseases amongst the Troops at Cuddapah.	49
Cuddapah jail..	52
Tables of diseases and remarks.	53
Bellary and Cuddapah jail, contrasted.	59
Kurnool, Jagheer of.	60
Table of diseases amongst the Troops.	67
Gooty, station of.	68
General Tables of diseases.	70
Remarks on the general Tables of diseases..	71
Remarks on Cholera in the Ceded Districts..	75
Tables of diseases in H. M. Regiment and the Honorable Company's Artillery.	82
Tables of diseases amongst officers, women, and children	83
Return of persons vaccinated.	86

APPENDIX.

Statement shewing the extent of accomodation, diet &c. for the prisoners in the jail of Bellary and Cuddapah..	i.
Meteorological observations.	ii.
Statistical tables for each Collectorate.	iii.

DIRECTIONS TO THE BINDER.

Map of the Ceded Districts to face the..........Title page.
————of Bellary.................................13
Plan of station, and environs of Cuddapah............29
Plan of Cantonment of Cuddapah...................47

CEDED DISTRICTS.

The Ceded Districts, one of the Military divisions of the Madras presidency, came into the possession of the Honorable East India Company in the year 1800, by a treaty entered into with His Highness the Nizam, or Soobah of the Deccan, subsequent to the fall of Tippoo Sultan, and the partition of his territories.

The country which may be described as a table-land, lying between the eastern and western ghauts, at an average elevation of about 1600 feet above the level of the sea, is of a triangular shape, and extends between the 13th and 16th degrees of north latitude, and the 76th, and 79° 30″ of east longitude;—comprising an area of 25,950 square miles, with a population of 2,307,964 inhabitants. It is bounded on the north by the Nizam's dominions, from which it is separated by the rivers Toombuddra and Kistnah;—on the east by the districts of Nellore and Guntoor, the eastern ghauts forming the natural boundary on this side;—the southern and western aspects of the country being bounded by the province of Mysore, and a part of the Southern Mahratta division.

The general appearance of the country is irregularly mountainous, with several ranges of hills, of both granitic and secondary formation, and extensive plains of regur or cotton soil, lying between them.

The principal rivers are the Toombuddra, Kistnah and Pennar.

The Ceded Districts, properly so called, is divided into two collectorates, those of Bellary and Cuddapah, to which the principality of Kurnool has lately been annexed. The military stations are, Bellary the head quarters of the division, and also the residence of the Civil authorities of the collectorate;—Cuddapah and Kurnool, stations for single native corps; and the hill fort of Gooty, where a detachment of a native corps is stationed, for the protection of certain State prisoners there confined.

Statistical tables for the collectorates of Bellary and Cuddapah, will be found in the appendix, showing the extent of land under cultivation in the different talooks, and the amount of population; with other interesting particulars.

BELLARY.

General description.

The Bellary collectorate, or western division of the Ceded Districts, comprises the northern part of the elevated table-land lying between the ranges of the eastern and western ghauts, which extends from the 11th to the 16th degrees of north latitude. The highest parts of the table-land are near Bangalore and Nundydroog, where the altitude above the sea is 3000 feet, from whence there is a fall in every direction. Towards the north, the declination continues for 250 miles, chiefly through the Bellary district, along the valleys through which the large rivers Toombuddra and Kistnah flow; and although the descent is so gradual, as to be imperceptible to the traveller, the fall from Bangalore to Bellary amounts in a distance of 188 miles, nearly due north, to 1818 feet, the latter place being found to be only 1182 feet above the sea.

All the rivers which have their origin in this district, or in the adjoining part of Mysore, follow a northerly course, the Hoogeree rises near to Serah in Mysore, which is 2,223 feet above the sea, and runs due north in nearly a straight line, until it empties itself into the Toombuddra. In its way it passes near to Bellary, which being 109 miles north of Serah, gives a fall in that distance, of 1041 feet. The collectorate comprises an area of 12,980 square miles. Mysore lies to the south and west, Cuddapah and Kurnool to the east, and to the north, the rivers Toombuddra and Kistnah form its boundary, separating it from the Dooab and the Deccan.

The district generally is very flat and open, but there are many hills of granite scattered over its surface, and it is intersected by numerous lower ranges. In the hot season the country has a sterile appearance, from the absence of trees, and all vegetation, but shortly after the rains fall in June, the plains become converted into vast fields of luxuriant grain. The open country is a rich black cotton ground, and near to the hills it is of a deep red, and is generally thickly covered with stones, of the same geological characters as the rocks composing them. Granite is chiefly met with about Bellary, Bejanuggur, Adoni and Paulsamoodrum. The principal ranges of hills are the Nullamulla, on the north eastern frontier, and the Kumply and Sundoor, on the western side. The former is composed of sand-stone and clay-slate, the two latter of a chloritic slate; in many of the hills, long dark coloured trap-dykes, shoot out prominently like walls, above the surface. A spur from the Sundoor range runs along the south side of the cantonment of Bellary, and extends in an easterly direction, to Boodiaul eight miles distant, where it abruptly terminates. A high point in this range is opposite to, and within four miles of the fort of Bellary, and is called the copper mountain, the height of which is 1600 feet above the plain, or 2800 above the sea. There is a small space of table-land on the top, which might be made available for a *sanatarium*, at a moderate expense. The chief objections to it are the steepness of the ascent, and the necessity of supplies of all kinds, and even water, having to be carried up from the plains. On one occasion also, some years ago, when a party of officers were preparing to ascend these hills, a baggage tent pitched on the summit, was struck by lightning, and two or three men killed.

The copper ore which is here found, is the green carbonate, in the state of clay, lying below the crest of the southern epaulment of the hill. Excavations are still to be seen, said to be the remains of mines worked by order of Hyder Ali; but which were abandoned in consequence of the expense exceeding the profit. Besides copper, hæmatitic iron ore in large quantities, is found, some of which possesses magnetic properties.

Rivers. The principal rivers are the Toombuddra, and Kistnah; the former rises in the western part of Mysore, and runs in a north easterly direction, until it joins the Kistnah a few miles below Kurnool; the latter rises near to Satarrha, and has a south easterly course towards Kurnool, where it again turns to the northward, and falls into the sea about 30 miles south of Masulipatam. In addition to these, the Pennar river rises at Nundydroog, and runs in a northerly direction for 130 miles, then turns to the eastward, passing by Cuddapah, and falls into the sea near Nellore. There are numerous other small rivers and nullahs, which empty themselves into the Toombuddra, and only contain running water during the rains.

The wood required for the use of the station of Bellary, is floated down the Toombuddra, but none of the rivers are navigable for any distance.

Several annicuts or dykes, are built across the head of the Toombuddra, to raise the height of the stream, from which water courses are opened, for the irrigation of extensive tracts of country along its banks, particularly at Humpy or Bejanuggur, Seeragoopah, and Rampoor. These dykes were constructed by the Hindoo sovereigns of Bejanuggur, in former days.

Tanks and wells. Tanks for the purposes of irrigation are numerous; one of the largest is the Duroogee tank, about 18 miles west of Bellary, which is chiefly fed by a small river running through the Sundoor valley, and an extensive sheet of wet cultivation, lies below its banks. The other large tanks, wells or bowries, are very deep, and require great labour in sinking them, having in general to be cut through solid rock. In the low grounds near the banks of rivers, water is usually found about 12 feet from the surface, but in other situations, it is not met with nearer than from 20 to 30 feet. The water of wells sunk in cotton ground, is always of that description called hard, and is very frequently brackish, and unfit either for drinking, or culinary purposes, from containing a large quantity of common salt, and of carbonate of lime; the former is likewise found on the surface, and the latter in the white calcareous earth, the invariable subsoil of the cotton lands, and it also fills up the interstices between the blocks of granite, which lie below the surface.

Vegetable productions and plants.

The most common indigenous trees are the *babool,* the *ber* and the *wild-date.* The babool or gum-arabic tree, is chiefly met with along the banks of nullahs, but is also found on the plains; the wood is very hard, and valuable for making ploughs and other agricultural implements. Gum is likewise collected from it, and the bark is used in tanning, and also in the distillation of arrack. The ber tree or zizyphus jujuba, has some resemblance to the birch, in the upper surface of the leaves being of a deep green, and the lower of a whitish colour. The wood is used in building, and the fruit is eaten by the natives. The leaves ground up with tyre are given in bowel complaints, and in difficult parturition. The leaves of the wild-date, elate sylvestris, are made into mats, and the stalks into baskets and tatties, and the fruit is much prized by the natives; the two last named trees grow in low sandy situations near nullahs. In the Nullamulla range and in the north-eastern part of the district, *teak, black palmyra,* and other valuable trees are found, and likewise the bamboo. Much useful wood is brought from Sundoor and the adjacent hills, from whence also Bellary is supplied with firewood.

The trees most commonly met with in gardens, are the same as those in other parts of India, such as the mango, tamarind, banians, margosa and cocoanut, topes of the two former being planted in red soil.

The only shrubs seen, and which over-run the uncultivated black soil, are the cassia auriculata, and the glacous leaved physic nut, iatropha glauca, or as it has been called croton lobatum. The former resembles the broom in appearance, having a bright yellow flower; its seeds are considered refrigerant; and the latter has a very unsightly appearance, and from its seed an oil is extracted, which is used in chronic rheumatism and paralytic affections. These with a few acacias, are the only plants to be seen on the vast plains of cotton ground.

The tortilis euphorbia is commonly found amongst rocks, and in red soil, with many other shrubs, such as the milk hedge, prickly pear, aloes, asclepias gigantea and datura fastuosa.

Mineral products. Among the mineral products of the Ceded districts, are iron of excellent quality, copper, lead, antimony manganese, culinary salt, natron or native soda, salt-petre, and a small quantity of alum.

It is probable that coal may exist in the lime and sand stone formation, about Cuddapah and in the bed of the Pennar, and it would be worth while in these situations, which abound with the finest natural springs, to ascertain by boring if this mineral exists.

Insects. Insects are not particularly numerous, but scorpions are very abundant, the cobra-de-capelle is met with, though very few snakes of any other description.

Birds. Birds are in great variety, as the hooppo, jay, dove, woodpecker, cuckoo, tailor, and mango birds; the quail, partridge, rock pigeon, pea fowl, florikin, bustard, snipe, teal, wild duck, flamingo, owl, and hawks of several kinds.

Wild animals. Wild animals are also numerous, as hares, antelopes, spotted deer, foxes, jackalls, hyenas; those confined to particular localities, are monkeys, wild hog, elk, bears, cheetahs and royal tigers.

Fish Fish is procured in but limited quantities.

Population. The population amounts to 1,226,703, and is composed of a great variety of castes. People of two different tongues meet as it were in the centre of the district, viz, the *teloogoos* and *canarese.* The teloogoo language is spoken in the eastern part of the district, and the canarese in the western; the line of separation lying half way between Bellary and Ghooty, but the teloogoo and canarese villages are very much intermixed, for some distance.

The teloogoo people are followers of Vishno, and burn their dead. The canarese worship Siva, and are chiefly of the Jungum caste, or those who wear the *lingum* or *phallus,* which is carried in a silver box on the breast, or tied round the arm; they bury their dead. There are also considerable numbers of Mahrattas and Mussulmans.

The principal objects of worship are Siva, in the form of a bull, and of the lingum; Hunnooman, in that of a monkey; and the cobra-de-capelle; offerings to the latter, are confined to the time of marriages. At Bejanuggur there is a celebrated lingum pagoda, to which natives from all parts of the country flock at the time of the annual festival. There is likewise another pagoda in Sundoor, erected to Cartika the hindoo Mars, which is also a place of pilgrimage. The people of both castes join in each others festivals. The guardian deity of villages is Mareeummah, and in time of sickness vows are made to her, and offerings of fowls, sheep, or buffaloes, to remove the evil. At Bellary, numerous sheep are sacrificed to this goddess, every tuesday and friday; in making the offering one person holds the head, and another the body of the animal, keeping it standing, whilst the poojaree or officiating priest, with a single stroke of the sacrificial axe, severs the head from the body. The head and right fore leg are the perquisite of the poojaree, and the persons who make the offering carry home the body of the animal to feast upon.

The inhabitants generally, are tall, stout and well formed, and are comfortably clad; their food chiefly consists of dry grain, particularly cholum, which is ground into flour, and eaten in the form of cakes, rice being but little used; and the description preferred is partially boiled grain, which has been dried in the sun; but which cannot be preserved beyond a few days.

Prevailing diseases.

Fevers are common in the cold weather and during the rains, but are generally mild, leaving no ill effects, such as enlarged spleens, or dropsy. When the disease is severe or fatal, the danger is generally owing to the supervention of affections of the head or chest.

Bowel complaints appear during the rains, and often prove fatal to old or sickly persons. Ophthalmia, or the country sore eye, is prevalent during the hot season, as also guinea worm; and scrofula is not an unfrequent disease; tubercular phthisis has not been seen, but severe and fatal cases of pneumonia, as a sequence of fever, are occasionally met with. Small pox is seldom heard of, and there can be no doubt that the infrequency of this dangerous disease, is to be ascribed to the general diffusion of vaccination throughout the country. Cholera unfortunately often makes its appearance both as an endemic, and also in an epidemic form, carrying off numbers of people. Diseases of the skin are not very prevalent.

Paupers do not appear to be numerous, they usually go from house to house in the evening, at the time the people make their principal meal, and beg a portion of food; but the inhabitants, both hindoos and mahomedans, are severely taxed by numerous able bodied religious mendicants, who go from door to door every morning, singing or playing on musical instruments, and boldly demanding charity; these sturdy vagrants will only accept money, or uncooked grain.

Villages and houses.

All the villages are surrounded by walls, and the houses are constructed of stone and mud, the roofs being flat and covered with earth. The doors are made of planks of wood, or of branches of trees strongly wattled together, and plastered over with clay, and cowdung; the floors being smoothed over about once a week with a similar mixture, which destroys vermin, and which when dry, has a very cleanly appearance.

Agriculture. The chief products of the cotton grounds are cholum, cumboo, millet and cotton; these likewise grow in light red soil, but the castor oil plant with various kinds of pulses,are chiefly cultivated in the latter, and are all sown at the same time. The state of agriculture in this country is very defective, especially in the manner of ploughing and manuring, but the after process of clearing the fields of weeds, and loosening the earth about the roots of the plants, appears to be well managed, by means of small hoes drawn by bullocks, an operation easily effected, from grain of every description being sown in drills.

On first breaking up cotton ground, and once in about every 10 or 12 years, the soil is turned up with a large plough drawn by 12 bullocks, and traversed several times in different directions, until weeds and jungle plants are entirely extirpated; a large tree is then drawn over it to break the clods of earth, thrown up by the plough; and an iron instrument called chinna coondooka, or the native harrow, three feet square, is afterwards passed over it, still further to level and smooth the surface. The grain is sown in three rows at once by the drill machine, worked by two bullocks, but large seeds as the cotton, and castor oil, are sown in single rows, by a drill box held in the hand. The harrow is again drawn over the surface, to cover in the seed. In succeeding years the small plough worked by two bullocks, and the harrow only are used.

Cotton is grown in drills along with cholum, or millet; with the former the drills are about six feet apart, and have from four to six rows of cholum, between each one of cotton; with the latter, the drills of cotton are only three feet apart, and have two rows of millet between them. When the crop of millet is cut down, a very singular and sudden change occurs, one day nothing being seen but yellow grain, which on the next disappears, and a thick crop of green cotton, about half a yard high remains. None of the fields are enclosed, but they are generally separated from each other, and protected at the sides of the road by rows of the prickly jamaica yellow thistle, argemone mexicana.

Bullocks travelling along the roads, when the grain is on the ground, are muzzled to prevent their committing depredations. In the irrigated ground, sugar cane and rice are cultivated, the latter without being transplanted. When the grain is cut, it is carried to the threshing floor, and trodden out by bullocks. The granaries in which it is stored are large holes dug in the ground, having only a narrow opening sufficient to enable a man to descend into them, but excavated to the size of six or more feet in diameter, and about the same in depth; when filled with grain the opening is closed with a stone, covered over with earth. Grain in time of war, used to be thus concealed from the enemy.

A preference is given to red soil for garden ground, in which carrots and onions of a very superior kind are produced as also chillies, tobacco, and flowering plants, for making the wreaths presented to idols. Gardens are watered from wells, the water being raised by bullocks; melons are extensively cultivated in the dry beds of rivers, the sand being excavated to the depth of two or three feet, in the form of pits or trenches, into which two or three baskets of earth and manure are thrown, previous to the seed being put in.

Horned cattle. The horned cattle of the district are of a very good description, draught bullocks sell at from 15 to 30 Rupees each, and cows with young calves, bring from 10 to 20 Rupees.

Diseases of cattle. Pedda rogum, the disease so called is a purging of slime and blood, during which the animal neither eats nor drinks. It occurs when heavy dews prevail. The treatment consists in giving equal parts of the bark of the mango and fig trees, with the astringent bark of the nawel, or calytranthus-caryophyllifolia in sour buttermilk, about a pint of which is administered daily. In a herd of 1,000 bullocks, 200 have sometimes been affected, of whom four-fifths have been known to die.

Domma rogum, a swelling of the abdomen attended with watery purging, cough, want of appetite, great thirst and frequent passing of urine, is a disease of the hot weather. In this complaint a mash of butter-milk, onions and rice, is usually given for three days; the animal is then fired on the chest, head and flanks, after which four drams of arrack, with the yolk of an egg, are given daily for three days. When this disease prevails, a fifth part of the herd may be expected to be attacked, the mortality amounting generally to 50 per cent of the sick.

Bubba rogum, is a swelling and trembling of the whole body, in which the animal neither eats nor drinks, and there is a constant flow of saliva from the mouth. The disease occurs during the rains. In the treatment, a mixture of common salt and turmeric is rubbed on the tongue, and green gram and onions, in butter-milk, are given frequently. The number attacked when this disease occurs, has averaged 10 per cent, and the mortality amongst those attacked is about the same.

Ghalee rogum, maggots in the hoofs. Camphor, green tobacco, and soot, are mixed with ghee, and applied to the feet, about 10 in 100 of those attacked die.

Diseases of sheep. Bubba rogum in the sheep, is an eruption over the body, which is calculated to destroy about 10 per cent of those attacked. No medicine is given, it occurs in the rains.

Domma rogum, is a disease of the hot weather, in which the animal is affected with puffiness of the belly, a loose watery purging, and loss of appetite. Three lines are fired across the nose, but no medicine is given. During the prevalence of this disease, the attacks have amounted to 40 per cent of the strength, and the mortality is generally one half of those affected.

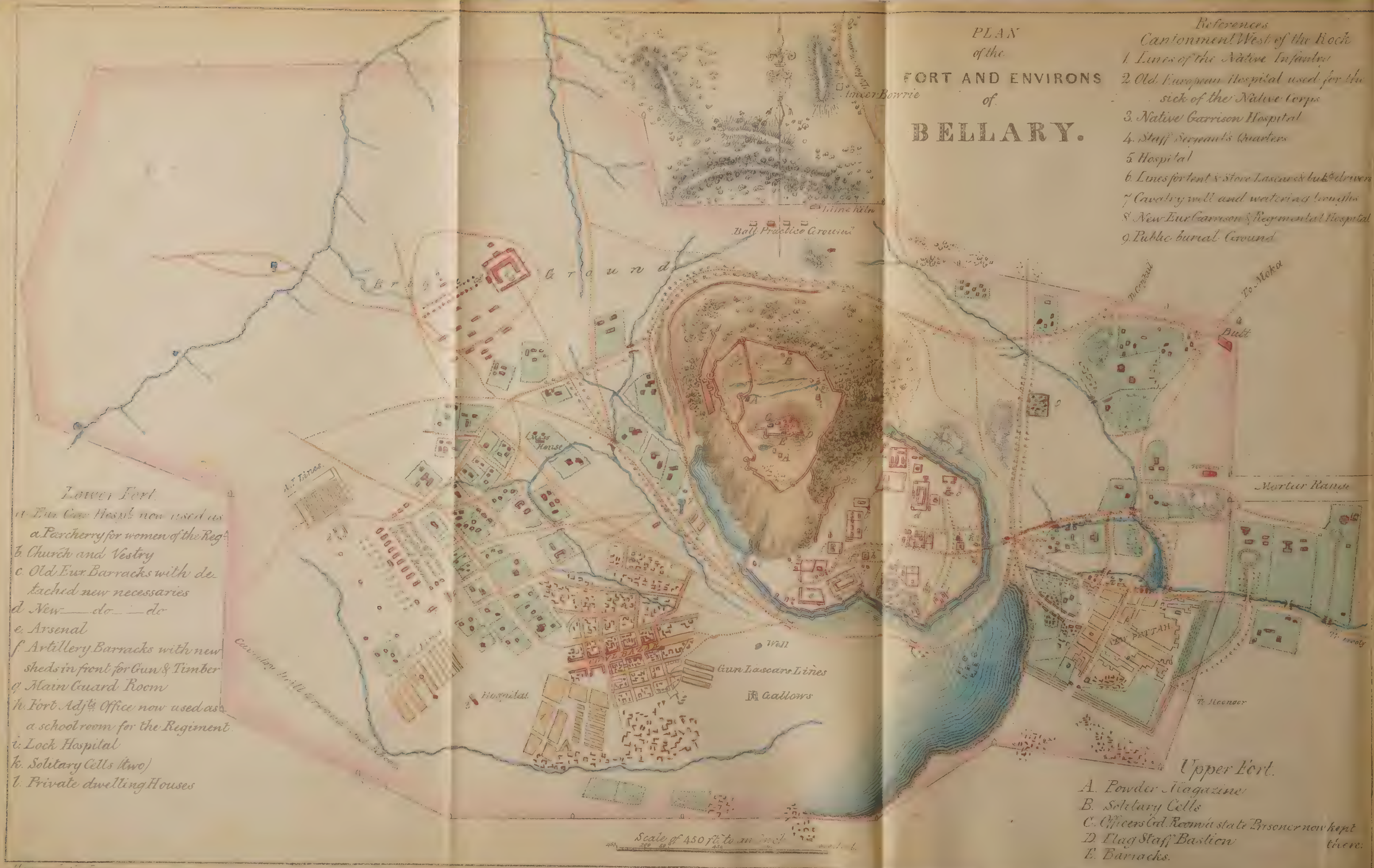
Kith komba rogum, is a very fatal disease which appears in the rains, and prevails extensively. The symptoms are swelling of the head and face, severe purging, trembling and shaking of the body. No treatment is employed. The attacks when it becomes epidemic, amount to 60 per cent on the strength, and the mortality amongst those attacked, is fully 90 per cent.

Large flocks of sheep are reared in the district, the flesh of which is of good quality, but the fleece, or hair, is coarse, and of a black colour. Sheep generally suffer most in wet climates, but notwithstanding the dryness of the Ceded districts, it will be seen they are subject to many fatal diseases.

Roads. From the level character of the cotton ground, and the absence of stones, the roads are good in dry weather, but heavy and bad, in the wet season. Although the white calcarious earth, which lies from about two to ten feet below the cotton soil, and the red gravelly earth found about the hills, are excellent materials for constructing roads, they are not used for that purpose. The value set upon a good road is strikingly seen in the preference given to one of those leading from Bellary to Madras; the shortest being viâ Cuddapah, but it is so bad and stony, that carts never take that route from choice, but prefer the Mooglee, or Peddoonaigdroog pass, and Nundy-droog, although the ascent is 2,000 feet higher than by the other road, and the distance is greater by upwards of 20 miles; while cart hire for the shortest route only, is paid. Cotton is sent in large quantities to Madras, by return carts which bring supplies to Bellary.

The country carts in use are of a singular construction. The wheels being from one and a half to two feet in diameter, and made either of flat circular pieces of wood, or of stone slabs; the axles revolve with the wheels, and the body of the cart is well raised above them, by two straight pieces of wood on each side, in which the wheels run, but carts with large wheels composed of spokes, felloes &c., are coming into use.

Manufactures. There is a considerable manufacture of good



PLAN
of the
FORT AND ENVIRONS
of
BELLARY.

References
Cantonment West of the Rock
1. Lines of the Native Infantry
2. Old European Hospital used for the sick of the Native Corps
3. Native Garrison Hospital
4. Staff Sergeant's Quarters
5. Hospital
6. Lines for tent & Store Lascars & bulk drivers
7. Cavalry well and watering troughs
8. New Eur. Garrison & Regimental Hospital
9. Public burial Ground
Lower Fort.
a. Eur. Cav. Hosp. now used as a Parcherry for women of the Regt.
b. Church and Vestry
c. Old Eur. Barracks with detached new necessaries
d. New — do — do
e. Arsenal
f. Artillery Barracks with new sheds in front for Gun & Timber
g. Main Guard Room
h. Fort Adjts. Office now used as a school room for the Regiment
i. Lock Hospital
k. Solitary Cells (two)
l. Private dwelling Houses
Upper Fort.
A. Powder Magazine
B. Solitary Cells
C. Officers Gd. Room a state Prisoner now kept there.
D. Flag Staff Bastion
E. Barracks.
Timmer Bowrie
Lime Kiln
Ball Practice Ground
Brigade Ground
Mess House
N.I. Lines
Well
Gun Lascars Lines
Gallows
Hospital
Bazaar
Cavalry Well & ground
Butt
To Moka
To Cowtaul
Mortar Range
Pettah
To Hoondoor
To Hooly
Scale of 450 ft. to an Inch
450
250
50
0
450

Woollen and cotton cloths. and cheap cumblies, woollen and cotton carpets, and cotton cloths at Bellary.

Salt. Common salt is made throughout the district; the salt earth being scraped from the surface of the ground, and carried by buffaloes to the pans, which are usually situated near nullahs, for the convenience of obtaining water. The pans are made of clay, with an aperture at the bottom to allow the brine to run out. They are filled with the earth, from which the saline parts are drawn off by lixiviation. When the process is finished, the earth is thrown out at the side of the pans, where it gradually accumulates, forming large mounds.

Iron. Iron of good quality is manufactured in Sundoor, and a few other places. The furnaces are small, and covered over with a thinly thatched roof. The bellows in use are made of an entire bullock's hide, and in working them, they are compressed both by the chest and arms. The iron is allowed to cool a little or harden, before it is removed, when it is drawn out from a hole of about a foot in diameter, at the bottom of the furnace; and four men then beat the red hot mass, with large wooden clubs, into a round body, somewhat larger than a man's head; it is then cut into halves with small narrow axes, about two inches broad, and allowed to cool. The clubs which are used instead of hammers, have small handles, and swell out into a large knob at the end.

Kunkar is generally found all over the district, it is burned into chunam or lime, in small kilns, by means of charcool.

STATION OF BELLARY.

Bellary lies in 15° 5″ north latitude, and 76° 59″ east longitude, being 1182 feet above the level of the sea, which is distant 220 miles on the west coast, and 240 on the east, it being about 180 miles to the ghauts on either side. The travelling distance to Belgaum is 203 miles, to Hydrabad 223, to Bangalore 188, to Madras 316 by way of Cuddapah, and by Chittoor and Paulsumoodrum 337 miles.

The station which is the head quarters of the Ceded districts, consists of the fort, military cantonment, bazaar and the pettah; with the Civil court, and Collector's cutcherry belonging to the Zillah.

Fort. The fort or fortified rock, around which the cantonment of Bellary is situated, is a bare granite hill, of an oblong, or rather a semi-elliptical form, the longest diameter of which extends from south to north; it rises abruptly from the plain to the height of four hundred and fifty feet, and is about two miles in circumference. Viewed on its eastern and southern sides, it presents a bold and precipitous aspect, and appears to be composed of a huge heap of loose fragments, irregularly piled on one another; but on its western face, it declines with a gradual slope towards the plain, and exhibits a smooth unbroken surface, indicating that it was originally one entire solid mass, and that, on its more exposed aspects, it has been gradually decomposed, by the continued action of the elements. At the distance of a few hundred yards to the northward, is a long ridge of bare rugged rocks of similar formation, and at a short distance to the eastward, are several lesser elevations of the same character. They are all of granitic origin, and are chiefly composed of felspar and ferruginous hornblende, the former frequently presenting large rhomboidal prisms, which strongly reflect the rays of light, and the latter being disseminated through the rock, in black shining crystals and granules, giving to it when recently fractured, a dark grey colour, but which, after exposure to the atmosphere, first assumes a dull greenish hue, and afterwards a light rusty brown, apparently from the readiness with which this species of hornblende undergoes decomposition.

The rock is defended by two distinct lines of works, constituting the upper and lower forts, both built of granite; in the upper one, the summit of which is flat and of considerable extent, stands the citadel, it is reputed to be of great antiquity, and might be rendered impregnable; it affords however no accommodation for troops, and is consequently never occupied, except by a small guard. The cells for the prisoners are built within it and from their elevation, are at all times cool and pleasant; several tanks or cisterns have been hollowed out in the rock, for the purpose of retaining rain water. The lower fort, which is of more recent construction, consists of low turrets connected together by curtains, is of a quadrangular figure, has a dry ditch and covered way in front, and surrounds the base of the rock, from its south-western, to its north-eastern angle; it is half a mile in diameter, and within it are the barracks for the Queen's regiment, and the Company's European artillery, the arsenal, the ordnance and commissariat stores, the protestant church, and numerous bungalows for officers.

The soil is artifical, and much impregnated with saltpetre; the wells within the fort are therefore all brackish, and the water used by the troops, is brought from without.

On the south side of the fort, about 100 yards from the rampart, is a large tank, with a road running along its edge; to the north, at the distance of 200 yards, is a rocky hill of granite; on the south west the ditch is widened, and walled up at one end so as to form a tank, which is filled by the rain from the upper fort, and which descends from the rock in cascades during heavy showers; and on the east, is a wide esplanade containing the burial ground, beyond which is the zillah court, jail, collector's cutcherry, and the houses of the principal European gentry. South east of the fort, and below the bund of the tank, is the pettah, in which the former inhabitants of the fort now reside, having been removed out in 1816, at a considerable expense to Government; at the head of the tank is the bazaar, and at the distance of about half a mile, lies the cantonment, with the native barracks and officers' houses.

According to a census taken in 1837, the population amounted to,

	Males.	Females.	Children.	Total.
Cowl bazaar..........	6,076	4,559	4,937	15,563
Bruce pettah........	4,597	4,979	5,287	14,863

The soil about the fort for the distance of a mile, on three sides, is red and gravelly; a strip of black cotton ground about half a mile in breadth, runs through the cantonment on the south, on which the houses are generally built. The ground slopes in all directions from the fort and cantonment, so that no water lodges in the neighbourhood, and there are no marshes in the district.

The plain around Bellary is flat, presenting scarcely any undulations; it is wholly destitute of jungle, lightly covered with verdure, and from want of water is but little cultivated. At the distance of about six miles to the westward, it is bounded by a low range of hills, scantily clothed with vegetation, which are composed of chloritic slate, traversed by greenstone dykes; to the eastward, it presents to the view a vast level expanse, studded with isolated masses of bare granitic rocks, and exhibiting in the distance detached ranges of low barren hills; apparently of similar formation. The prevailing soil, is what is termed black cotton ground, consisting of a dark tenacious loam, extremely fertile, and in many places strongly impregnated with saline materials, especially nitre which is obtained in considerable quantities by lixiviation, during the dry season, and constitutes an article of commerce. This kind of soil every where predominates, except immediately around the granitic elevations, where from the disintegration of the rocks, it is light, and sandy, through which water readily percolates.

There are no rivers, nor marshy grounds within some miles of the cantonment; and the only appreciable source from which malaria can be supposed to arise, is the large tank, which is situated to the south east of the rock, and approaches within a few yards of the fort. This when full, is upwards of three miles in circumference, but being for the most part extremely shallow, it is soon reduced during the dry season, to half that extent, by the rapid evaporation from its surface. In this half dried state, noxious exhalations have been supposed to issue from it, giving origin to remittent fever which has occasionally prevailed here; but some other causes however, must be referred to as capable of producing this form of fever, as it has occurred during seasons, when the tank was completely filled. There is another but a much smaller tank, which extends along the western base of the rock, and terminates at the fortifications, where it may be made, in case of emergency, to communicate with the dry ditch; it is the source from which the garrison and the inhabitants are supplied with water for culinary and other purposes.

Climate. The climate is characterized by the extreme dryness of the air at all times; the annual fall of rain being very limited, dews in general are light, and last but for a short time, and there are no heavy fogs.

The wind blows principally from the west and north-west, from March to November; and from the east and south-east in December, January and February, but with considerable daily variations. In the hot season, a strong wind generally blows from the westward during the night, oppressive calms or lulls are not common, and usually occur about sun set, in the hot weather. The hottest part of the year is from the beginning or middle of March, to the end of May, or the setting in of the south-west monsoon. The most oppressive part of the day is usually from 2 to 7 P. M., but the nights and mornings are comparatively cool, even at the warmest period of the year. In the cold season, the thermometer in the open air, falls to 55° in the morning, and at times even below 50°, and rises to about 100° at 2 P. M., in the sun. The glare is at all times very great from the white sparkling nature of the ground, which, as well the roads, is composed of the debris of granite rock; and verdure continues only for a short time, owing to the little rain which falls, and to the dry rocky nature of the soil. Lightning and thunder occur occasionally from April to July, and again in September and October. The thunder is usually very loud, and a year seldom passes without the electric fluid injuring buildings or persons within the limits of the fort, or cantonment, and similar accidents are likewise by no means rare in the district.

The following table exhibits the average height of the thermometer at sunrise, between noon and 2 P. M., and at sunset; and also the amount of rain for each month, during the two years ending 1842. The thermometer was kept in the dispensary of the European garrison hospital, a low tiled building without verandahs.

	1841.				1842.			
	Thermometer.				Thermometer.			
	Sunrise.	12 to 2 P. M.	Sunset.	Pluviometer Inches.	Sunrise.	12 to 2 P. M.	Sunset.	Pluviometer Inches.
January....	78	84	82	0 0	74	84	83	0 0
February..	74	87	85	0 02	73	84	84	0 0
March.. ..	83	92	92	0 03	81	97	90	0 0
April......	86	94	94	4 19	86	99	90	0 02
May	84	92	92	0 09	82	92	100	1 81
June......	81	86	85	4 40	76	86	84	2 75
July......	80	85	83	1 17	79	85	84	0 60
August....	79	83	82	6 10	77	83	82	1 74
September..	75	75	78	4 61	78	83	81	8 44
October....	78	83	82	5 38	79	84	83	2 21
November..	73	82	81	0 39	76	82	82	0 03
December...	72	81	81	0 02	73	81	80	0 0
				Total. 26 40				Total. 17 57

European barracks. The barracks of the European troops are situated within the fort; there are two distinct buildings for the infantry, about 560 yards apart, the first appropriated to the right wing of the regiment, is built on high ground close to the ramparts, on the south side, nearly overlooking the tank; and that of the left wing, is near to the ramparts on the north, on lower ground; each is constructed in the form of a square, having a verandah all round; the roofs are pent and tiled, with ventilators. The artillery barrack is upon high ground, close to the base of the rock, and about 100 yards from the infantry right wing barrack; it is in the form of three sides of a square, and has a row of pillars in the centre of the rooms, to support the roof which is tiled, and without ventilators. Each of these buildings is surrounded by a high wall. The plan of erecting barracks in the form of a square, is objectionable in a country like India, where free ventilation is so very necessary, and the doors and windows are not sufficiently numerous, being in the infantry 15 feet apart, and in the artillery barracks, from 12 to 28 feet. To regulate and command the temperature and currents of air, the doors should be venetianed to the ground, the windows should be long, narrow and in two compartments, the lower being venetianed, and extending to within a foot of the floor, and the upper both venetianed and glazed. The space between the windows, or windows and doors, should be sufficient for two cots, with their heads to the wall, so that each man would be close to either a door or a window, and enjoy a sufficiency of light, fresh air, and coolness. The two latter are absolutely requisite to health in this country, and can only be obtained, in sleeping apartments, by an adequate number of doors and windows.

Barracks are in course of erection, calculated to accommodate a wing of an European regiment, on open elevated ground near the garrison hospital, and are getting on rapidly; they are considered to be the best buildings of the kind to be seen in this country for European soldiers.

European hospitals. There is also an old European hospital in the fort, which is used as a receiving hospital for cholera patients, and for the sick women, and children of the regiment.

The new European hospital is situated in a fine, open, dry plain, about a mile to the westward of the fort, and is calculated to contain 130 patients.

The military cantontment, and the lines of the native troops, are situated at a short distance on the western side of the rock while the General officer commanding the division, with the military staff, and officers of the civil service, reside on the opposite side; at the distance of a little more than half a mile to the south-east, is the native pettah, said to contain nearly fifteen thousand souls; and about the same distance to the south-west, is the cooly bazar, separated from the former by the head of the large tank.

Native barrack and hospitals.

The native barracks or places of arms, ten in number, are situated about a mile to the south-west of the fort, they have a southern aspect, are built of stone, and have tiled roofs. They can accommodate three regiments of native infantry, and one of cavalry.

The hospitals for native troops, adjoin the places of arms, and consist of three buildings, one of which contains two wards, sufficient for the sick of two regiments, another is the native garrison hospital, which is formed of the most western place of arms, and the third is the cavalry hospital.

Tables of disease (from No. 1 to No. 10) amongst the European and native troops, with some remarks are given at the end of the report of this division, as in the preceding reports; it remains however to give here some account of those amongst the prisoners in the jail.

The Court house, jail and hospital are situated in one large compound to the eastward of the fort, about half a mile distant, and close to a small rocky hill, which protects them in some measure, from the strong unpleasant north-west winds which prevail during several months of the year. The site is high and dry, and there are no marshes in the neighbourhood.

Jail.

The jail consists of several buildings, for the various classes of prisoners, in separate areas; the whole forming an oblong square, surrounded by a high wall, sufficiently distant to allow a free circulation of air. The department for the male convicts consists of 21 cells, each fourteen feet in breadth and varying in length from nine to thirty;

that for the female convicts contains 6 cells, each fourteen feet square; the jail for prisoners under trial consists of 8 cells, each fourteen feet square. The different courts are spacious; the cells are of a good height and well built and are freely ventilated, and kept remarkably clean; there is no water within the jail, and the prisoners procure and carry it for their own use, from two large wells in the outer compound.

A table shewing the diet, clothing, labour &c. is given as usual at the end of the report. In this jail prisoners of the same câste are allowed to club together in small messes, and to cook their food as they please. The kitchens for the various câstes are very convenient.

Hospital. About 50 yards from the principal entrance to the jail is the hospital in a separate enclosure; it is terraced and consists of two wards, the one 37 by 14, the other 18 by 14 feet; the windows are large and both wards are well ventilated, the floors are of mud and raised two feet from the ground. The offices attached to it consist of a surgery, store room, two cooking rooms and a necessary, all in a state of good repair.

Behind the hospital in a separate court yard are five small cells for insane prisoners, each 14 by 12 feet; when unoccupied by people of this class, some of the prisoners under trial are placed in them.

The male convict jail was built in 1808, the female ditto, the jail for prisoners under trial or civil jail, and the hospital, in 1818, the cells for lunatics in 1826; and a tiled verandah was erected round the inner side of each of these buildings in 1829.

The following tables shew the nature and amount of disease and mortality from each class of disease, with the percentage of sick to strength, and of deaths to disease, during ten years ending December 1838.

JAIL OF BELLARY.

No. 11.—*Table exhibiting the number of Admissions and Deaths of the Convicted Prisoners, from each class of Disease for* 9 *years.*

CLASSES.	DISEASES.	exclusive of 1831. From 1829 to 1838. Aggregate strength 5,058.				Admissions and deaths from each class of disease.				Total admissions from each class of disease.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
		1st Half.		2d Half.		1st Half.		2d Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers......	Febris ephemera	4	1	21	0	268	34	226	21	494	55	9 ·766	11 ·133
	,, intermit quot.	237	21	194	12								
	,, tertiana......	1	0	0	0								
	,, remittens. ..	22	11	10	9								
	,, continua.....	4	1	1	0								
	Cholera.........	1	0	28	22	1	0	28	22	29	22	0 ·573	75 ·862
Diseases of the abdominal viscera......	Diarrhœa	39	8	87	42	126	21	203	78	329	99	6 ·504	30 ·091
	Dysenteria acuta et chronica..	87	13	116	36								
Diseases of the lungs and heart.	Catarrhus......	1	0	1	1	9	4	9	6	18	10	0 ·355	55 ·555
	Asthma........	0	0	1	1								
	Pneumonia.. ..	2	2	2	1								
	Phthisis pulmonalis..........	5	2	5	2								
	Hœmoptysis....	1	0	0	1								
Diseases of the brain.	Epilepsia.......	1	0	1	0	4	1	6	2	10	3	0 ·197	30 ·000
	Apoplexia......	1	1	1	1								
	Paralysis.......	1	0	2	0								
	Mania..........	1	0	2	1								
Eruptive fevers......	Variola.........	5	4	0	0	26	4	3	0	29	4	0 ·573	13 ·793
	Varicella.......	21	0	3	0								
	Rubeola..	0	0	0	0								
Dropsies....	Anasarca.......	12	5	9	6	12	5	9	6	21	11	0 ·415	52 ·380
Rheumatic affections.	Rheumat. acutus et chronicus	78	7	65	13	78	7	65	13	143	20	2 ·827	13 ·986
Venereal affections ..	Syphilis primitiva..........	10	1	7	0	12	1	8	0	20	1	0 ·395	5 ·000
	Gonorrhœa.....	1	0	1	0								
	Hernia humoralis............	1	0	0	0								
Specific diseases.....	Atrophia.	22	15	34	16	162	33	68	23	230	56	4 ·547	24 ·347
	Elephantiasis....	1	0	0	0								
	Dracunculus. ...	107	1	10	3								
	Beriberi........	24	16	16	4								
	Scrophula.......	8	1	8	0								
Diseases of the eye...	Morbi oculorum	19	0	28	1	19	0	28	1	47	1	0 ·929	2 ·127
Do Skin.	,, Cutis..	145	0	194	1	145	0	194	1	339	1	6 ·702	0 ·295
	Other diseases..	449	4	443	17	449	4	443	17	892	21	17 ·635	2 ·354
	Total..	1311	114	1290	190	1311	114	1290	190	2601	304	51 ·423	11 ·687

JAIL OF BELLARY.

No. 12.—*Table exhibiting the Number of Admissions and Deaths of the Prisoners under Trial, from each class of Disease for 9 years.*

CLASSES.	DISEASES.	exclusive of 1831. From 1829 to 1838. Aggregate strength 1304.				Admissions and deaths from each class of disease.				Total admissions from each class of disease.	Total deaths from each class.	Average per centage of sick to strength.	Average per centage of deaths to sick.
		1st Half.		2d. Half		1st Half.		2d. Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers......	Febris ephemera	0	0	0	0	31	8	24	6	55	14	4 .217	25 .454
	,, intermit quot.	21	3	17	0								
	,, tertiana......	0	0	0	0								
	,, remittens	10	5	6	5								
	,, continua......	0	0	1	1								
	Cholera	1	1	3	3	1	1	3	3	4	4	0 .306	100 0
Diseases of the abdominal viscera......	Dysenteria acuta et chronica.	21	7	50	19	35	14	79	32	114	46	8 .742	40 .350
	Diarrhœa.......	9	7	25	13								
	Colica..........	2	0	0	0								
	Dyspepsia......	3	0	2	0								
	Hepatitis acuta et chronica...	0	0	2	0								
Diseases of the Lungs	Phthisis pulmonalis..........	1	0	3	1	1	0	3	1	4	1	0 .306	25 000
Diseases of the Brain.	Apoplexia......	2	1	2	1	9	2	20	2	29	4	2 .224	13 .793
	Epilepsia.......	1	1	1	0								
	Paralysis........	1	0	0	0								
	Mania..........	5	0	17	1								
Eruptive fevers......	Varicella.	1	0	0	0	1	0	0	0	1	0	0 .076	0 .000
Dropsy.....	Anasarca.......	1	1	5	4	1	1	5	4	6	5	0 .460	83 .333
Rheumatic affections.	Rheumatismus. ac. et chronicus	7	1	9	0	9	1	9	0	18	1	1 .380	5 .555
	Odontalgia.....	2	0	0	0								
Venereal affections..	Syphilis primitiva...........	8	0	3	1	9	0	3	1	12	1	0 .920	8 .333
	Gonorrhœa.....	1	0	0	0								
Specific diseases.....	Atrophia........	10	2	8	1	61	16	47	21	108	37	8 .282	34 .259
	Beriberi........	27	14	32	17								
	Dracunculus....	24	0	7	3								
Diseases of the Eye..	Morbi oculorum	2	0	4	0	2	0	4	0	6	0	0 ·460	0 .000
Do. Skin.	,, cutis......	44	0	28	0	44	0	28	0	72	0	5 ·521	0 .000
	Other diseases...	76	6	58	4	76	6	58	4	134	10	10 ·275	7 ·462
	Total....	280	49	283	74	280	49	283	74	563	123	43 ·176	31 ·847

The average annual numerical strength of the convicts during the nine years, has been 562, and the admissions 289, or 51·423 per cent; while the number of deaths annually during the same period, has averaged nearly 34, or 6·010 per cent on the strength; the total number of admissions being 2601, of deaths 304, and the aggregate strength, 5058.

Amongst the prisoners waiting for trial, the admissions into hospital have amounted to 563, and the deaths to 123, from an aggregate strength of 1304; the per centage of sick being 43·176 and of deaths 9·432 to strength.

The most numerous admissions amongst both classes of prisoners have been from *fever, bowel complaints, rheumatism, atrophy, and beriberi;* and the greatest mortality has been occasioned by the same diseases.

In the following table No. 13, are exhibited the annual admissions and deaths from eight of the principal diseases, viz. fever, cholera, diarrhœa, dysentery, anasarca, rheumatism, atrophia and beriberi. The total sick treated and mortality are also given, for the purpose of shewing the proportion of the whole mortality produced by these diseases; being 359 out of 427, or somewhat more than 5—6th.

	Table No. 13. Jail of Bellary.	1829.		1830.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		Total.	
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Convicts.	Fever	39	1	86	6	101	8	44	8	58	7	72	9	61	7	25	7	8	2	494	55
	Cholera	0	0	0	0	0	0	3	2	0	0	0	0	0	0	26	20	0	0	29	22
	Diarrhœa	20	1	8	2	21	5	10	5	38	25	9	3	6	2	9	5	5	2	126	50
	Dysentery	9	0	15	3	61	8	40	10	39	13	23	9	8	5	4	0	4	1	203	49
	Anasarca	2	0	0	0	9	8	2	2	0	0	4	0	1	0	3	1	0	0	21	11
	Rheumatism	13	0	11	1	22	3	18	4	31	9	22	2	11	0	4	0	11	1	143	20
	Atrophy	0	0	0	0	0	0	0	0	3	1	39	18	13	10	0	1	1	1	56	31
	Beriberi	0	0	0	0	1	0	36	17	3	3	0	0	0	0	0	0	0	0	40	20
	Admissions and deaths from these diseases	83	2	120	12	215	32	153	48	172	58	169	41	100	24	71	34	29	7	1112	258
	Total admissions and deaths	234	3	325	14	352	37	347	54	480	70	422	50	243	29	116	38	82	9	2601	304
	Strength each year	396		433		533		592		913		773		635		508		275		5058	
under Trial.	Fever	1	0	6	0	8	1	11	6	13	1	8	1	2	1	0	0	6	1	55	11
	Cholera	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	2	0	0	4	4
	Diarrhœa	0	0	2	1	5	3	7	4	16	9	0	1	1	0	1	0	2	2	34	20
	Dysentery	0	0	4	0	9	7	32	9	13	4	4	3	3	2	3	1	3	0	71	26
	Anasacra	2	2	2	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	6	5
	Rheumatism	1	0	2	0	1	0	5	1	0	0	6	0	0	0	0	0	1	0	16	1
	Atrophy	0	0	0	0	0	0	0	0	2	1	15	2	1	0	0	0	0	0	18	3
	Beriberi	0	0	0	0	0	0	53	27	6	4	0	0	0	0	0	0	0	0	59	31
	Admissions and deaths from these diseases	4	2	16	2	23	11	110	49	50	19	35	9	7	3	6	3	12	3	263	101
	Total admissions and deaths	9	2	48	2	52	15	155	54	145	28	90	11	23	4	10	4	31	3	563	123
	Strength each year	21		102		154		365		366		141		43		46		72		1204	
	Admissions and deaths amongst both classes of prisoners	243	5	373	16	404	52	502	108	625	98	512	61	266	33	126	42	113	12	3164	427
	Total Strength each year	420		535		687		948		1279		914		678		554		347		6362	
	Per centage of deaths to strength	1 ·190		2 ·990		7 ·569		11 ·392		7 ·662		6 ·673		4 ·867		7 ·581		3 ·458		6 ·711	
	Per centage of sick to strength	57 ·857		69 ·719		58 ·809		52 ·953		48 ·866		56 ·017		39 ·233		22 ·743		32 ·564		49 ·732	
	Per centage of deaths to sick treated	2 ·057		4 ·289		12 ·871		21 ·513		15 ·680		11 ·914		12 ·406		33 ·333		10 ·619		13 ·495	

The following extracts from the reports of the medical officers in charge, will explain many of the points, which may excite surprise, in the preceding table.

" From the circumstance of the Bellary jail having been constituted a general Depot for prisoners, there have been frequent draughts from Chittoor and Salem, many individuals from amongst whom were admitted into hospital with dysentery, and several died. Old men were the greatest sufferers, and it has been observed, that, when any of this description were attacked with dysentery or fever in a severe form, the powers of the constitution had become too feeble to struggle against the disease, a desponding apathetic state of mind soon succeeded, with indifference to life, and a disinclination to take food or medicine." *Dated* 1*st July*, 1832.

" A good deal of sickness has prevailed in the jail of Bellary during the last six months, and more than the usual proportion of deaths has occurred, for which it is difficult to assign a sufficient reason; no change has taken place in the diet or labour of the prisoners. It may perhaps be correctly attributed to a peculiar state of the atmosphere, attending the failure of the north-east monsoon."

" The complaints have been those generally met with amongst prisoners, (fever and bowel complaints), but greatly aggravated by despondency and lowness of spirits, and perhaps latterly from apprehension of the fate of but too many with affections smiliar to their own. A great many when apparently convalescent lost their appetite, became leucophlegmatic, and eventually dropsical, which proceeded to general anasarca, and terminated in death, in spite of all treatment, which in fact seemed to have very little effect. Several of these cases resembled beriberi in many of the symptoms, and were treated as such, with calomel, squills and digitalis, and active purgatives, but without any benefit." *Dated* 31*st December*, 1832.

The famine which in 1833, prevailed throughout the Carnatic, extended to this part of the country, and was severely felt over the entire Ceded districts; to it may be attributed the unusual mortality which occurred in that year. It was observed that the prisoners crowded into the jail in proportion as distress and starvation became more and more pressing, for many committed offences, to gain admission into the jail, that they might obtain food. And as might be expected, the wretched individuals admitted under these circumstances, were peculiarly liable to the invasion of disease, and, as will be observed, one half of the whole mortality in that year, took place amongst the prisoners waiting for trial. It is worthy of record that although cholera prevailed to a great extent in the bazar and amongst the troops in the fort, (especially during the first half of the year), only 5 cases with 4 deaths ocurred amongst the inmates of the jail.

The rains were very deficient during the succeeding year, 1834;—and a reference to the table will exhibit a continuance of the same diseases, and great mortality, and a crowded state of the jail.

In 1835, the jail was still greatly crowded, and the mortality much above the average, and it is recorded that "the deaths have generally occurred after protracted illness, the prisoners do not (in many instances) regain their health and vigour after attacks of disease, as others differently situated would do, and in this enfeebled state, they are subject to relapses or invasions of other forms of disease, as bowel complaints and dropsical affections under which they ultimately sink."

Some prisoners fall into this state of debility without any previous attack of acute disease, and these cases are classed under the head *atrophia;* confinement and the depressing passions appear to be the principal causes in keeping up and producing this state of the system, and to them is conjoined advanced age in some of the cases." *Dated* 1835.

During the remaining three years the number of prisoners was considerably reduced, especially in 1838, and (with the exception of an epidemic visitation of cholera in the latter half of 1837, which carried off 22 men,) the mortality has also greatly diminished; several hundred prisoners were removed from this jail to work on the great western road during these three years.

On looking at the results of the two first and last two years in the preceding table it would appear that the jail of Bellary is comparatively healthy, when the number of prisoners do not much exceed 500. It must be remembered however that the usually fatal diseases in jails are occasionally less frequent, or absent altogether for some years; still there can be no question, that, when a large number of human beings are crowded together in a limited space, their state of health and vigour must suffer and decline, and the ordinary diseases, especially bowel complaints, then assume a peculiar form.

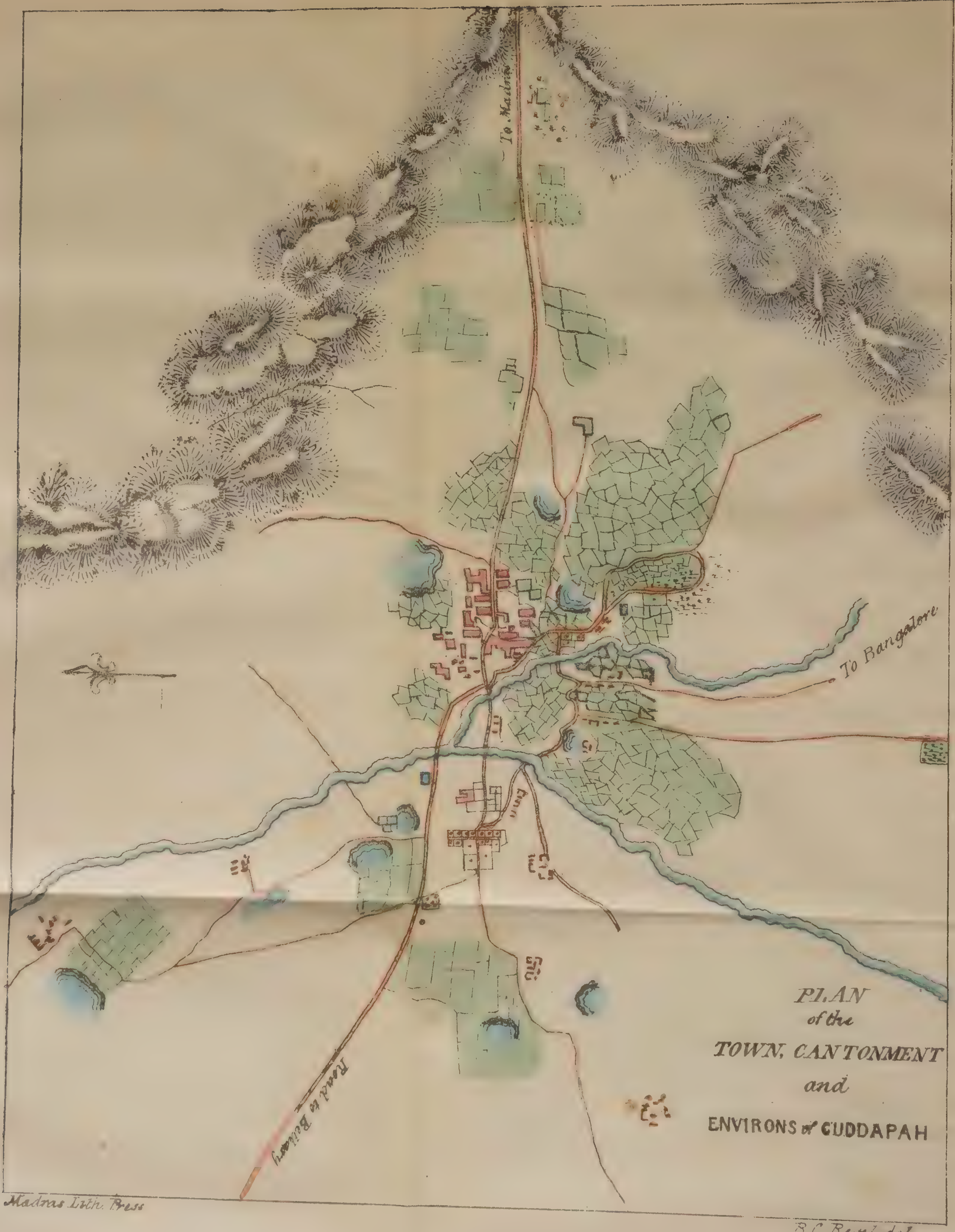
Many of the prisoners are Brinjaries, a class of people accustomed to live day and night in the open air, and upon whom the confinement in the jail must act very perniciously; a melancholy instance of which is thus recorded. "One of this class (Brinjarie) a young man, who died of atrophia during the last six months, requested sometime before his death to be allowed to lie in the open air, saying at the same time that he was a *jungle-walla*, and had never inhabited a house, and that the confinement in the cells did not agree with him." *Dated 30th June*, 1836.

With regard to the prevalence of the disease *beriberi* in the years 1833, and 1834, some remarks will be given hereafter in the account of the jail at Cuddapah.

CANTONMENT OF CUDDAPAH.

Situation of the cantonment of Cuddapah.

Cuddapah, a station for a native regiment, is situated on a gentle declivity, nearly in the centre of the district, being in latitude 14° 32″ north, and longitude 78° 54″ east. It is distant 166 miles north west of Madras; 152 south east of Bellary; 242 south of Hyderabad; 83½ west of Nellore, and 154 north east of Bangalore; and is 507 feet above the level of the sea.



PLAN
of the
TOWN, CANTONMENT
and
ENVIRONS of CUDDAPAH

Madras Lith. Press

B. C. Reyel del.

Boundaries. The cantonment is bounded on the east, by a small river which separates it from the town of Cuddapah, from which it is distant about three miles; on the west, by an extensive and open plain, stretching with little interruption to Ghooty; on the north, by the Bellary road, some cultivated ground and a large tank; and on the south, by a road on its left flank, and by cultivated ground.

Mountains &c. The mountains in the vicinity form an uninterrupted chain of great extent, consisting of numerous parallel and continuous ridges, which rise abruptly from the plains, traverse the whole length of the district, and constitute part of the eastern ghauts.

Near Chinnoor, six miles north of the cantonment, the western connecting ridges of this elevated chain, take a south eastern direction, until within two miles of Cuddapah, where they are intersected by the Pennar river, which winds between them in an easterly course. They thence proceed south-west to Bakrapett, ten miles from Cuddapah, where they separate into two ranges, one running south, and the other west, the latter becomes identified with another but lower range, which taking its rise near the Toombuddra, runs in a semicircular direction by Bungunpully and Ghooty; from thence it turns south-east to Gundicotta,—above the ghaut—where it is intersected by a remarkable breach, the sides of which are elevated upwards of 200 feet from the base, and through which the Pennar river flows.

About 34 miles from Cuddapah, the range becomes connected, with the eastern ghauts; hence the plain of Cuddapah is encircled by a chain of mountains, which greatly modify its climate. Those on the west, distant upwards of thirty miles, do not seriously affect it, but, as will appear hereafter, those on the north-east, and south, being within from three to six miles, have the most injurious influence. Within a mile or two of their bases, the old and new towns of Cuddapah, and three miles further west, the cantonment, are enclosed within a mountainous amphitheatre, varying in elevation from 1,000 to 1,500 feet, the extremeties of the arc being about 12 miles apart. (see sketch).

Hills. The ranges of hills towards the south, differ from the above in physical characters, not only in consisting of isolated hills, but also by their pyramidal form, with summits terminating in sharp and precipitous cliffs, or abruptly truncated, or round backed; while the other ranges are long ridges, some hogbacked and ribbed, with the sides deeply excavated by mountain-torrents, the bases of which form an unbroken abutment of perpendicular rocks, from 50 to 60 feet in height, presenting the appearance of gigantic walls artificially constructed.

None of the hills possess the requisites for a sanatarium, on the contrary, they have been found unhealthy; such Europeans, as have been induced to visit them, in quest of a cooler climate during the hot winds, have all suffered more or less, and some have even died of bilious remittent fever contracted there. Nor is this more than might be expected from their character, being covered with low dense jungle, and long rank grass.

Muddenpilly. The Muddenpilly range however, 56 miles south west of Cuddapah, is an exception in some respects, forming a pleasant cool retreat in the hot season. The table land is extensive, but unfortunately, after the first rains in June, fever becomes common. During the months of March, April and May, when Cuddapah is insufferably hot, and the whole face of the low country, is that of an arid desert, Muddenpilly presents the most delightful contrast, both in climate and scenery, the temperature seldom exceeding 87° during the day, and the nights being refreshingly cool, while the place abounds in fruitful gardens, shady topes of trees, and green valleys.*

---

* Extract from an Officer's journal dated May 1837.

"The thatched bungalow at Royachooty, built by an Officer of a Regiment stationed here several years ago, is situated on the summit of a range of hills, and nearly a mile to the south of the village, commanding an extensive view of the country, which rises gradually from Neelacuntroypett (a village at the southern extremity of the ghaut, and

Before Cuddapah was made a military cantonment, a native regiment was stationed at Royachooty, 33 miles to the southward. The country in this vicinity being an elevated, undulating and open plain, from 2 to 300 feet higher than Cuddapah, and though the temperature during the day, is as high, as at the latter place, the nights are always cool, an advantage of the greatest importance to convalescents.

Rivers. The chief river is the Pennar, which rising in the mountains of Nundydroog, and holding a northerly course as far as Ghooty, enters the district near Tallapodatoor, on the Bellary road, and after describing many windings, flows to Chinnoor, and passes by Sedhout within nine miles of Cuddapah, from whence taking an easterly course, it enters the sea at Gungaputnam.

While within the district it first receives the Coond river which has its source in the mountains on the north-east, and flows southerly to join the Pennar near Camlapoor; about nine miles from this village, and close to Appiapully, the Pennar

12 miles from Baukrapett on the northern or Cuddapah side) until it assumes the appearance of an elevated steppe, of huge rocky barren hills, some continuous, others isolated, while the enclosed plains are apparently a wild dreary, unproductive waste, without a single tree to meet the eye, miserable villages being seen here and there, with spots of cultivation. At 6 P. M. of the 5th started to visit the palace at Gorremcondah (21 miles distant.) The building is a bad imitation of the Laul Baugh at Seringapatam, being inferior both in extent of accommodation, and elegance of architecture, and is now in a complete state of dilapidation. The fall in the thermometer which stood at 98° at Royachooty, to 88° at Gorremcondah, was delightfully refreshing. The mountain of Gorremcondah is one majestic, almost perpendicular mass of granite, towering to the height of about 8 or 900 feet. The rock is throughout naked, and its convex summit is crested with a strong fortification, constituting a formidable hill-fort, inaccessible, save on the eastern face, where a narrow difficult pathway winds through a defile of projecting rocks which, through the disintegrating influence of ages, have been rent from the mountain. Here stood once the capital of the district of Gorremcondah (at present comprehended in that of Cuddapah,) but now a heap of shapeless ruins, the haunt of beasts of prey, such as jackals, hyenas, &c. and the source of deadly malaria, the noxious influence of which is seen in the sickly and dropsical appearance, the premature senility, the anasarcous extremities and enlarged spleens, of the squalid and thinly scattered population of the neighbouring country, which though much more elevated than that of Royachooty, is over grown, particularly between the hills, with low dense jungle, while the country about Royachooty, is perfectly open and free from underwood. The natives too complain of the water being bad, and it is certainly much imbued with saline materials. At 5 P.M., on the 6th, left the palace and having arrived next day at Muddenpilly, 23 miles distant, was no less astonished than delighted, to find within so short a distance from the burning plains of Cuddapah, its perfect contrast in scenery, and climate. Here are two small bungalows, enclosed in an ample park of several acres, planted on either side with the most magestic banyans, around is a lawn of beautiful green turf; in the heat of the day the thermometer did not rise above 87°, and the air free refreshing, soft and balmy, and imparted an elastic and exhilarating influence both to body and mind. The gardens produce grapes, both of the green and purple varieties, as well as peaches, strawberries, apples and guavas. Another striking instance of the contrast between this climate and that of Cuddapah, is the backward state of the season here. Mangoes do not ripen until July, and are pulled *green* to be ripened *artificially*. The cholum and raggy crops, which are stacked in the end of February at Cuddapah, were not yet reaped, water was found to boil at 208° of Fahrenheit, the elevation may therefore be stated at 2,120feet above the sea, and about 1620 above Cuddapah.

is joined by the Papugny, coming from the opposite direction. This last river arises in the hills east of Muddenpilly, and emerges from them at Vaimpully. Through the sandy bed of this river, which is about 100 feet in width, with precipitous banks, the 28th Regiment passed round these hills on route from Cuddapah to Mercara, via Royachooty in February 1838; the ghaut above Bakrapett being impassable, owing less to the steepness of the ascent, which is only between 7 and 800 feet above Cuddapah, than to the state of the road.

Two nullahs having their sources in the hills to the south-west of Cuddapah, run in a north-easterly direction. The more western of them, the Boogawunkah, winds immediately in front of the regimental lines, (see sketch No. 2) where it is from 20 to 30 yards in breadth, but is never full unless in very heavy and continued rains, when its depth is between three and four feet; its rise and fall however, are very rapid, and in dry weather it is merely a chain of small pools. Its bed being deep, having in it numerous quicksands, and there being no bridge across, it prevents the evening drive being extended in the direction of the town of Cuddapah. The other nullah, called the Cuddapah river, is much larger, and sweeps immediately along the west of the town, which it supplies with water. Across the latter which is about 40 yards in width, there is a bridge, along which the road to Bellary passes,; and a little to the north, both the nullahs converge, and ultimately uniting, disembogue themselves into the Pennar four miles north of Cuddapah.

Proceeding east, the next rivers which discharge their waters into the Pennar, are the Sugglear and the Chegar. The districts south of the Pennar, are drained by the Papugny, and the Chegar rivers, and their tributaries; and the valley of Cuddapah, by the two mountain streams above described; while the country to the north, is drained by the Coond and Sugglear, with their respective streams.

With the exception of the Pennar, none of these rivers much exceed 150 feet in width, their beds are generally sandy, with low banks, the Pennar however, which runs through a soft soil, and is 80 yards in breadth, has banks in some places upwards of 16 feet in depth; the current, owing to the country being nearly a perfect level, seldom exceeds two miles an hour, though the mountain streams are as usual rapid. In seasons of drought, which not unfrequently occur, some of these streams become rapidly dried up, when the vegetable and animal deposits in them, are exposed to the intense rays of the sun, and prove a source of miasm, this circumstance appears to contribute to the origin and prevalence of epidemics in such seasons. In the hilly parts of the district, their banks which are fringed with low dense jungle, are composed of rocks, and detritus, but in the plains, they sweep along gardens and cultivated fields, numerous wells being excavated on their banks.

Tanks. Tanks are also every where to be seen, in which fish are both few and bad, though highly valued by the inhabitants.

Climate. The most prominent characteristics of this climate, are, intense heat during the day, with oppressive closeness and stagnation of air, at night. These two conditions of the atmosphere, go far to explain its enervating influence on the European constitution. The temperature is not only one of the highest known (the mean, in the shade, during the year, being 81° 4″, the maximum 98°, and the minimum 65°,) but the daily range within doors, is very considerable, being from 15° to 20°, and the difference of the annual extremes 33°.

The year may be divided into three seasons, viz: the cool, the hot and dry, and the hot and humid.

1st. The cool season commences in October, and continues till February; about the end of October the north-east monsoon sets in, generally with thunder storms, and vivid lightning, preceding a heavy fall of rain.

In 1837, the rain set in in October, and continued with little cessation until the 12th November, being the heaviest fall known for 30 years.

About the end of November the monsoon generally ceases, but in some years it fails altogether. During this season the wind is steady from north east, and the weather is exceedingly pleasant, the whole country is under cultivation, and the luxuriancy of the crops every where, testifies the fertility of the soil. The mornings are cool, the thermometer in the open air, at 5 o'clock A.M. being often as low as 60°, and in the shade, between 65° and 70°, the mean temperature being 77°, the maximum 89°, and the daily range from 15° to 20°. The atmosphere is particularly clear, and the nights cool; towards the middle of February, the weather begins to get hot, and Europeans cannot remain out of doors later than 8 o'clock A.M.

2d. The crops in the valleys are all reaped and stacked in February, and in March the country begins to present an altered appearance, and as the month advances, the wind blowing strongly from the east, becomes hot at midday, but the nights continue cool for some time; as the season advances vegetation disappears, the grass becoming burned up, and the country at last resembles a dreary, sandy waste.

In April and May, the atmosphere glows intensely; and the rapidity of evaporation, particularly in the latter month, is shown by the state of the tanks, whose slimy beds become exposed to the rays of the scorching sun. In April the air is almost perfectly calm, interrupted only by occasional, light, uncertain airs during the day, which fail altogether at night, and the heat of the still atmosphere, becomes increased by radiation from the neighbouring rocks,* which form a screen intercepting ventilation. It is impossible to sleep within doors at this season, and even in the open air, the nights are often passed in a feverish and restless state; in May, the nights are likewise oppressive, for, though the regular hot winds set in from the westward, about the 3d of that month, by which, through the medium of wet tatties, the house during the day, can be made tolerably cool, after sunset the winds fail altogether.

---

* That the immediate vicinity of the hills has the effect of rendering the nights so hot at Cuddapah, is evident, from the fact, that in all other parts of the district, as well as throughout Bellary, the nights are found to be cool.

The mean temperature of this season of the year, is 84° 8″, the minimum 69°, and maximum 98°, in the shade.

3d. The south west monsoon sets in early in June, several days before which the weather becomes close and oppressive, and the sensation of suffocating heat at night, is almost insupportable, respiration becomes laborious, and the mind is dejected from the stagnant, and condensed state of the atmosphere. At length flashes of lightning are seen, and loud distant peals of thunder are heard rolling on, increasing in frequency as the rain commences, which continues to fall in torrents for some hours, cooling and refreshing the atmosphere. These visitations however are often very partial, and confined to the neighbouring hills, whilst the valleys are scorched with heat, and enveloped in clouds of dust, which being almost in an impalpable state, and driven along by the winds, penetrates into every crevice. During this season a strong south-westerly wind blows all day, and as the rain is seldom sufficient to saturate the surface, the whole atmosphere is darkened with clouds of fine sand, which even closed doors, and glass windows, fail to exclude. At sunset the wind usually moderates, and subsides into an oppressive calm, still more distressing from the air being humid, thus increasing the relaxation and exhaustion, consequent on want of sleep.

Cuddapah being upwards of three times the distance from the western, that it is from the eastern coast, and in a valley 300 miles north-east of the mountains of Coorg, from which direction the periodical winds blow, is most unfavorably situated, with respect to the south-west monsoon ; for long before the rains can reach it, they have been almost entirely arrested by, and expended on the lofty chain of the western ghauts. That this is actually the case, is evident from the fact that, even at Fraserpett, only 19 miles east of Mercara, the capital of Coorg, and 1300 feet lower ; the average fall of rain in the south west monsoon, seldom attains 40 inches, whilst at Mercara, it generally exceeds 100 ; if therefore, the difference be so great at the distance of 19 miles, it must of necessity be much greater at Cuddapah ; besides, the elevated plateau of Mysore intervening, farther intercepts the rain, and the little that reaches to the neighbourhood of Cuddapah, is interrupted by the surrounding hills. During this season, which comprehends from June to September, the mean temperature was observed in the year 1838, to be 83° 4″, the maximum 95°, and the minimum 72°.

From the above general description of the climate of Cuddapah, it may be inferred, that it cannot be otherwise than unfavorable to the European constitution, as well from the prevalence of malaria in the neighbourhood, the intense heat, unavoidable confinement within doors, the want of exercise, and often sleepless nights during a considerable portion of the year. Its effects therefore, sooner or later become visible, and during the years 1837 and 1838, in which the 28th Regiment N. I. was stationed at Cuddapah, every officer of the corps, suffered more or less from the effect of climate; and two were in consequence obliged to return to Europe.

Shortly before leaving Secunderabad for Cuddapah, the same corps suffered severely from epidemic fever, and agreeably to what has been often observed to result, the change from a good to an indifferent climate improved the health of the Regiment for sometime; but proofs of its unhealthiness soon became frequent, for when cholera or other epidemic diseases prevail in the country, Cuddapah always suffers severely.

Soil. The soil of the extensive plains to the west and north of the district, consists of a rich black cotton loam, but in the vicinity of the hills, and in the valley of Cuddapah, it is overlaid with an alluvial deposit, the debris of the neighbouring rocks, comminuted to an impalpable powder, rendering it light and sandy, and in some places it is intermixed with an adhesive reddish earth.

Geological remarks. The eastern and western ranges of mountains consist chiefly of gneiss, overlaid with sand stone, and syenite; the beds being variously contorted, and intersected with veins of green stone.

The principal rock in the southern ranges is granite, with gneiss and mica slate, all more or less in a state of decomposition.

The soil on the whole, is generally very productive, when a sufficient quantity of rain falls, but Doopaud, the most northerly talook, bordering on the Kurnool and Guntoor districts, has been very much depopulated of late years, in consequence of a general failure of rain, causing emigration.

Nodulous lime stone, and potter's earth, are plentiful throughout the district, and a speices of coarse marble, of a blue colour, and which is easily cut, is abundant, and is used at Cuddapah for the flooring of houses.

A coarse kind of purple clay slate, is very common in Doopaud and the hills north of that talook, bordering on Paulnaud, and the Kistnah. In the valley of Cuddapah it is found in horizontal beds, several feet beneath the surface, in a soft state, but on exposure to the air it becomes hard, and wells are generally faced with it. Soda is found in the form of an efflorescent carbonate, in a red ferruginous soil in the valleys, as well as about Cuddapah; it is used instead of soap by the natives, and the *Dhobies* manufacture soap from it, by the addition of chunam and cocoanut oil, to the concentrated ley. The soft mass is placed in segments of cocoanut shells, and exposed to the sun, till it hardens into a cake. Nitrate of potash, and the chloride of soda, are also found in great abundance, both being intermixed with reddish soft earth, incrusting the surface. These salts, particularly the latter, which is most abundant, are extracted by lixiviation, and evaporation. Numerous pits for this purpose are seen excavated in several parts of the plains, surrounded with mounds of earth; the salt thus obtained is very impure, and scarcely fit for culinary purposes.

Boring experiments have of late years been made in various parts of India, principally with the view of forming artesian wells, but no trials have been made yet in the Cuddapah collectorate, with the view of discovering coal, although the formation, in many situations, presents geologically speaking more favorable indications of the existence of this valuable mineral, than any other part of the Madras presidency. This for the most part is of sand stone, varying in its structure, from a quartz rock, to a conglomerate and loose grit, of various shades, from white to deep red, and some times beautifully variegated, as in the vicinity of Sedhout; it usually rests on lime stone of a deep blue colour, containing iron pyrites, and veined with calcarious spar.

The soil on the surface contains much calcarious and saline deposits, consisting of natron, and chloride of soda; copious springs of pure water, which possibly may have their source in subjacent coal beds, flow from both descriptions of rock. The Cuddapah sand stone resembles the carboniferous arenaceous rock of Cherra Poonja, on which a bed of coal is seen to rest, on an insulated summit, 300 feet above the level of the sea. The coal fields of Burdwar and Palamow, both repose on low hills of sand stone. In age it appears to assimilate more to the old red or carboniferous sand stone of England, than to the new red formation, to which it has been compared, and as far as has been hitherto discovered, is non-fossiliferous.

It is also remarkable as being the matrix of most of the diamonds, for which Golcondah has long been celebrated; may not the presence of this gem, which is the purest mineral carbon known, therefore, indicate the existence of carbon in another form?

From the above cursory remarks, it is not intended to draw the inference that the formation of coal over the whole surface of the globe was simultaneous, or that this mineral must necessarily exist in the Cuddapah formation, but by a plain statement of local geological facts, to draw attention and excite investigation to a subject of interest; science too, would undoubtedly reap some fruits from the knowledge obtained of the different strata penetrated, and even illustration might be thrown on the ingenious views of such men as M. Marago and Bischoff, regarding the internal temperature of our planet.

Water. Well water throughout the country, is strongly impregnated with the saline products of the soil, and as these become more concentrated by rapid evaporation in the hot weather, it then becomes quite unfit for domestic uses; Europeans are therefore obliged to procure drinking water, from a distance of from one to three miles from Cuddapah.

The natives generally make use of river or tank water; but though more free from saline impregnations, the latter in particular often holds in suspension a large proportion of earthy matter, and from being stagnant is moreover generally contaminated with various animal and vegetable matters in a state of decomposition.

The natives attribute many diseases to the quality of the water, and in this opinion they are neither altogether singular, nor perhaps far from the truth. Galen ascribes Elephantiasis, which Alpinus informs us, is endemic in Egypt, to the impure waters of the Nile; and Lucretius says "est elepas morbus qui propter flumina Nili gignitur, Ægyto in medio"; and Dr. Cleghorn states, that hard water has a tendency to produce diseases of the *spleen* in certain animals, especially sheep, which is the case he says, on the eastern side of the island of Minorca!—an opinion adopted by Dr. Paris, (article "aqua.") The latter also informs us, that pigeons refuse hard water after being accustomed to that which is soft; and snipe have been known to avoid those paddy fields and swamps, which were irrigated with water containing saline ingredients, to which cause, the well known scarcity of these birds in the district of Cuddapah, may be attributed.

Causes of Fever. With respect to Cuddapah, it is found that noxious exhalations, the existence of which are inferred from certain effects on the animal economy, are most prevalent from the end of June, to the end of January, because the extrinsic agents most influential in favouring the evolution of those emanations, in soils and situations capable of engendering them are *then* most active in *this* district, namely intense heat, acting on a wet surface. Hence, from February to the end of May, malarious diseases, are less frequent, from the atmosphere being dry, and the whole country burned up.

The probable sources of Malaria, under the operation of heat and moisture, such as extensive and dense jungles, on and around the hills, muddy and slimy beds, of half filled tanks and wells, and marshy ground under wet cultivation, are numerous. The nature of the manure employed throughout the district, namely green boughs of trees, may also be enumerated as another source of disease, and turning up such ground, has been found in the West Indies to be a very dangerous operation; Cassan describes it as sometimes producing fevers which resemble an absolute plague, the labourers even dying on the spot, if they attempt to remain at night on the ground which they have broken up during the day. With these may also be classed the preparation of indigo; the neighbourhood of such manufactories being unpleasant in the extreme, from the offensive smell of vegetable matter undergoing decomposition, and its noxious influence is still further propagated, by its being used as manure.

The saline nature of the soil it is believed, also exerts an injurious influence on the nature of the poison, as it is well known, that estuaries particularly within the tropics, are generally productive of the worst forms of malarious fevers.

With reference to the diffusion of these emanations at Cuddapah, it appears certain, that its particular position with respect to the mountains in the vicinity, and the sloping plains on its west, by which it is placed in a bason, must have the effect of preventing its dissipation.

The south west wind also blows towards it, across a dreary plain, which is quite a marsh for several months.

Lastly the greater prevalence of malarious disease, from June to the end of September, is also attributable to sudden atmospherical vicissitudes; part of the nights being so close and oppressive, as often to compel both Europeans and natives, to quit their houses for the cooler atmosphere out side, and which is succeeded perhaps in a short time, by a bleak cold wind, blowing from the hills to the south west saturated with moisture; which acting on an exhausted and relaxed frame, bedewed with perspiration, is extremely apt to occasion fever.

Vegetation which commences after the first rains in June, or after occasional showers, often becomes again burned up by returning drought, before the setting in of the N. E. monsoon. In the hills, however, where the rains are more constant, the surface becomes covered with rank coarse grass, part of which is set fire to in February, and part preserved for thatching houses.

After the first showers in June, the ground is ploughed preparatory to laying down both dry and wet grains. The manure used for the dry crops consists of ashes and sheep's dung, that of the oxen, owing to these animals being held sacred by hindoos, is reserved for fuel, and for plastering the walls and floors of houses, but the quantity of manure is every where insufficient. Between June and August, should the supply of water in the tanks be sufficient, the soil for wet cultivation, having been previously ploughed and harrowed once or twice, is manured, with the green boughs of trees, which are embedded in the soft earth and the fields then laid under water; after decomposition has begun the water is drawn off, the grain is sown, and the fields are again laid under water, which is occasionally renewed as it becomes dried by evaporation, until the crops are nearly ripe.

Of the principal vegetable productions, paddy and jonaloo, are sown from July to September, sudjaloo in June, and all others in September.

The extensive plains of black soil to the north-west, produce large crops of cotton, wheat and indigo. The talooks which chiefly supply rice are Cumbum, Chinnoor, and Camlapoor. In the other parts of the district dry grains, such as cholum, raggy, &c. are principally cultivated.

In the gardens about the town of Cuddapah, but principally in the Muddenpully talook, sugar cane, tobacco, turmeric and betel leaf are grown. At Muddenpully, probably the best and purest sugar candy to be found in the Madras provinces, is manufactured, a large quantity of which is exported. It has been sold at Bangalore as China sugar candy, to which it is equal, except in colour.

All the usual kitchen garden vegetables common to the country, are procurable, the gardens being watered from wells. The climate however is unfavorable for horticulture, as far as regards European vegetables which do not thrive, owing to the intense heat of the meridian sun, and want of rain.

Though wood is scarce in the vicinity, there are however many large mango, peepul, and tamarind trees to be seen, which, when the plains are covered with cultivation, give the face of the country a pleasing appearance.

Fruits. The fruits most abundant, are the mango, tamarind, plantain, water melons in great variety, and pumplemoses. In some gardens in Muddenpully the guava, lime, pomegranate, peach, apple, grape and citron are found, but may be considered as exotics.

Wild animals. Wild animals are not numerous, those met with are the jackal, fox, hare, antelope, hog, and wolf; the two first only, are found in the plains, in which no game, unless a few snipes, florikin and rock pigeons are seen, in the cool season; the others frequent the hills, together with a few red legged partridges, jungle, and spur fowl. Sometimes a stray tiger, or panther are heard of in the plains, but are soon destroyed by the inhabitants.

Minerals. Besides the mineral products already mentioned, iron is very abundant in the hills, but is not exported, sufficient for internal consumption merely, being smelted. Lead and copper are also found in some situations.

There are likewise diamond mines, about 7 miles from Cuddapah, between Chinnoor and a range of hills, on either side of the Pennar river. They consist merely of pits rudely excavated, and surrounded with heaps of stones. The diamonds are said to be found in alluvial soil, and in rocks of the latest formation ; the mines have not been worked of late, and from being known for several centuries past, it is probable they are exhausted.

Roads. The principal roads are, one to Madras being the continuation of the Bellary road, it is the best in the district, and is provided with good bungalows for travellers, at regular stages. It runs first east and by south to Wontimettah, and crosses the Chegar river, on the left bank of which at Nundaloor, is the third bungalow from Cuddapah.

The Bellary road was originally made when Sir Thomas Munro was collector of the Balaghaut districts, but it is much cut up, and in need of repair. It is planted on both sides with large trees, principally the peepul and neem, which afford a pleasant shade ; but, as it runs chiefly through black cotton soil, it is nearly impassable in heavy rains, and in the vicinity of the cantonment, is a bed of fine sand several feet in depth; on this road there are also good bungalows at regular stages.

The Hyderabad road, via the Moorcondah ghaut, scarcely deserves the name, it runs nearly due north from the cantonment.

The Nellore road takes a due east direction, and is also very rocky and stony.

The Bangalore road proceeding south-west from Cuddapah, is nearly impassable for carts, in several parts it runs between narrow rocky defiles, over hilly and often mountainous country.

There are two roads connecting the cantonment and town of Cuddapah, first, one passing through the centre of the regimental lines, which is the most direct, and crosses the bridge over the Cuddapah river, thence passing through the town and fort to the civilians' lines; the other, which is very narrow, runs along the left of the regimental lines, and turning to the south is intersected by the deep sandy bed of the Boogawanka, and finally winding to the east, is again intersected by the still broader bed of the Cuddapah river, whence it proceeds to the civilians' lines, leaving the town on the north.

Endemic and Epidemic diseases.

Malarious fevers are usually of the quotidian type. The exciting cause of which in most instances, has been exposure to atmospherical vicissitudes; in ordinary cases it yields to simple treatment, such as emetics, mild aperients and bark, or sulphate of quinine.

Dysentery.

This disease, as it occurs in the valley of Cuddapah, is frequently either a sequel of fever, or complicated with it, but in cases to be noticed hereafter, it appears also to be caused by a malarious and very humid atmosphere; and this form of disease is seen most frequently in the hilly districts.

In natives, dysenteric affections are removed by means of a few leeches, and a blister to the abdomen, mild aperients and the use of the sulphate of quinine, with vegetable and mineral astringents, and opium.

In two cases which occurred amongst European officers, in 1836 and 37, one was of a mild form, having readily yielded to the use of the blue pill and ipecacuanha, with an occasional dose of castor oil; but the other, which was complicated with disease of the liver and lungs, ultimately proved fatal.

Hypertrophy of the spleen, is, like dysentery, the result of malarious fever, especially if the fever proves obstinate; the intermittents of the hilly districts however, appear to have a greater tendency to produce splenick affections, than those occurring in other situations, where fevers are not less frequent; occasioned it would seem by circumstances not as yet well understood; and these engorgements occur, in cases where the paroxysms of fever have been comparatively slight. "In moist countries," says Dr. Bigsby, "whether warm or temperate, diseases of the spleen are endemic, as in Italy, Holland, South America and some parts of India, in fact where-ever malaria exists;" accordingly in the valley of Cuddapah, where fever is very general, the disease in question is but rarely seen, whilst it is remarkably common in the hilly or mountainous talooks of Gurrumcondah and Muddenpully, where the climate is more moist.

The most approved treatment consists in the employment of a combination of aperients, with iron and tonics, which had been laid aside in Great Britain in favour of mercury, until recently. The good effects of mercury as a deobstruent, in chronic diseases of the spleen, are of doubtful efficacy, more particularly when a cachectic state of the system is present. In order to relieve the engorgement of the viscus, local bleeding with leeches, when the strength of the system admits of their use, and subsequently counter irritation by means of blisters, as well as the frequent use of warm purgatives and bitters, is the most approved mode of treatment. When the pain, tension, and weight have been relieved by such means, iron, quinine, and iodine, are then found to produce the best effects.

Anasarca.

Anasarca is very common in the districts in which affections of the spleen are prevalent, and is almost invariably the result of organic visceral disease. The most efficacious mode of treatment is found to be the use of a combination of aperients, diuretics and tonics, but above all things, change of climate is most essential.

Hepatitis.

Hepatitis is very rarely seen amongst natives, to whose constitutions the climate in this respect does not appear obnoxious. Two cases occurred in 1836 and 37, amongst the European officers of the regiment at Cuddapah, which appeared to be occasioned by the effect of heat.

Health of European children.

The climate is found to be unfavorable to European children, in whom the gastro-intestinal functions, become torpid, and otherwise disordered ; irritation supervenes and is followed by dysentery, tabes mesenterica, and general atrophy. The only effectual remedy in such cases, is found to be an immediate removal of the patient to the sea coast.

Abortion &c.

Abortion and menorrhagia, are very common both in European and native females.

Rheumatism.

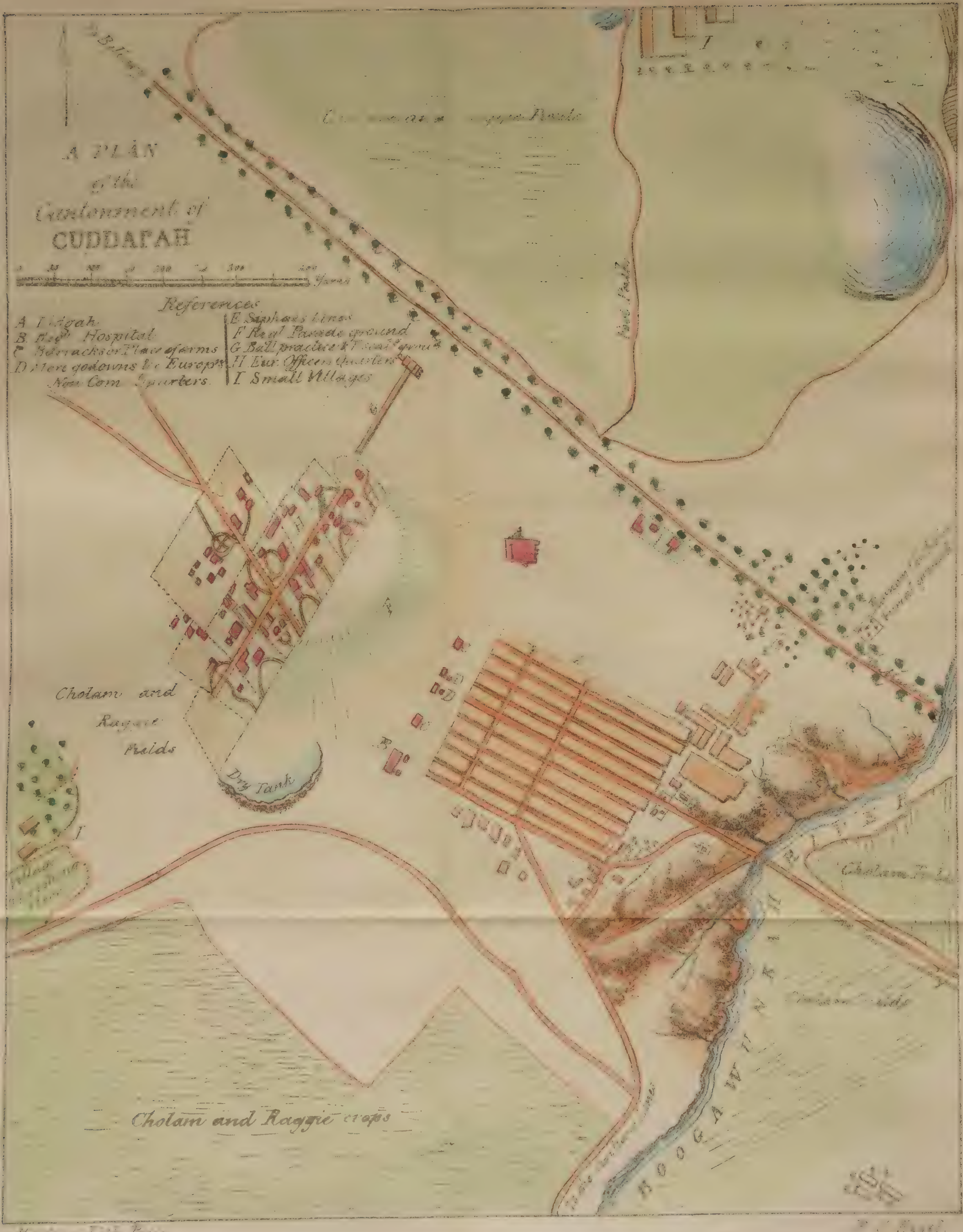
Rheumatism is very prevalent in natives, the exciting cause, of which in most instances, can be traced to exposure to atmospherical vicissitudes. It is generally seen in the chronic form, and unattended with constitutional disturbance ; though in many cases, accessions of local inflammation eventually induce disorganization of the tissues of the joints, the ligaments becoming thickened, with depositions in the bursæ. But agreeably to Cullen, another form of the disease is seen, in which there is "*tumor plerumque nullus*," acute local pain being the only complaint. These cases however are more neuralgic than rheumatic, for they soon yield to anodyne liniments, and a few doses of the carbonate of iron ; whereas, the other form of the disease, requires local bleedings and vesications, bark with the mineral acids, or decoction of sarsaparilla, guaiacum and mercurial alteratives, in the treatment.

Psora.

Psora is very prevalent in the hot season, the result of the combined influence of want of cleanliness, and the saline impurities of the water.

Cholera.

Cholera appeared in Cuddapah, as an epidemic, in the middle of October 1837, simultaneously with the arrival of a number of pilgrims from Triputty, where it had been raging to a great extent ; but though there was a daily communication between the town and the regimental lines, the disease did not extend to the latter, until the 1st. November, when a heavy fall of rain from the north-east occurred. It did not however prevail extensively in either place, but was both rapid in its course, and fatal in its result. Fortunately very few cases occurred amongst the sepoys of the regi-



Madras Lith. Press

[illegible]

ment. Cholera again made its appearance in 1839, and 1841 and was more fatal.

In Mr. W. Scot's report of this disease, cholera is recorded as having made its first appearance at Cuddapah on the 9th December 1818, eight days later than at Triputty, from whence it appears at that time also to have extended to Cuddapah.

Barracks. The barracks, are two substantially built detached buildings, see sketch of cantonment, lying parallel with each other, built of brick and chunam, and tiled. The soil on which they stand is sandy, and the site being a gentle declivity, they are well drained; and, lying north and south, are open to the periodical winds.

The building on the right of the lines, is 60 feet long, by 16 feet broad within the walls, which are 11 feet high; it has thirteen folding doors, and seven windows.

That immediately on the right of the hospital, is also of the same dimensions, but has only ten folding doors, and two windows.

Serjeant's quarters. The serjeants' quarters lie between the right wing of the barrack, and the store room. They consist of two rooms, each 14 feet by 17, and 10 feet high, with two folding doors, and four widows.

There are two solitary cells, each eight feet square, and 16 feet in height, with two doors, and two windows, situated on the left of the hospital.

Hospital. The hospital is on the extreme left; and is built of like substantial materials, but its site is much lower than that of the barracks, and the soil near it is impregnated with salt-petre; the floor is not sufficiently elevated and water lodges around during heavy rains. The hospital lies parallel with the other public buildings, and having ventilators in the roof, is always well aired. It is supplied with water from the river in rear of the lines, except in the hot season, when it is procured from a large well, but as in the other wells in the cantonment, the water is brackish.

The dimensions of the hospital are, length 88½, breadth 19½, and height of walls 11 feet; it has two folding doors, one on either side, and 17 windows. The native sick prefer lying on mats placed on the ground, to cots, and but for the low situation of the hospital, cots in so dry a climate would be unnecessary. A surgery is divided off one end, which is 8½, by 19½ feet.

The ground to the left, for some distance, is uncultivated, but beyond that, fields of raggy and cholum extend to the south-west, and in front and between it and the officers' lines, is a large dry tank which should be filled up, being a receptacle for filth, no disease has however been attributed to the locality of the hospital.

The following table exhibits the amount of diseases and mortality, *which have occurred* amongst the native Troops *at this station,* during a period of nine years and six months; from 1829 to 1841. It includes the returns of those regiments only who have occupied the station during a period of six or twelve consecutive months.

No. 14.—*Table exhibiting the number of Admissions and Deaths, amongst the native Troops stationed at Cuddapah, during a period of nine years and six months, from* 1829 *to* 1841.

Aggregate Strength. 8483.		Admissions.	Deaths.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
CLASSES.	DISEASES.						
Fevers......	Febrisephemera	1661	1	2948	20	34 ·751	0 ·678
	,, intermit quot.	1017	11				
	,, tertiana......	98	1				
	,, remittens	138	2				
	,, com : cont....	34	5				
	Cholera	136	62	136	62	1 ·603	45 ·589
Diseases of the abdominal viscera..	Diarrhœa.......	69	1	269	6	3 ·171	2 ·230
	Dysenteria acuta et chronica.	96	0				
	Obstipatio..	6	0				
	Colica..........	12	0				
	Dyspepsia......	67	3				
	Hœmorrhois....	6	1				
	Icterus.........	5	1				
	Splenitis........	3	0				
	Hepatitis.......	5	0				
Diseases of the Lungs	Catarrhus......	20	0	73	15	0 ·860	20 ·547
	Asthma........	16	3				
	Phthisis pulmonalis.......	3	1				
	Pneumonia.. ..	26	8				
	Hydrothorax...	2	2				
	Dyspnœa.......	6	1				
Diseases of the Brain.	Apoplexia......	4	3	35	4	0 ·412	11 ·428
	Paralysis........	6	0				
	Amentia..	8	1				
	Mania..........	16	0				
	Delirium Tremens.	1	0				
Eruptive fevers.	Variola.........	10	2	68	2	0 ·801	2 ·941
	Varicella.......	53	0				
	Rubeola..	4	0				
	Erysipelas......	1	0				
Dropsies....	Anasarca.......	24	3	35	5	0 ·412	14 ·285
	Ascites.........	11	2				
	Rheumatismus.	476	3	476	3	5 ·611	0 ·630
Venereal affections..	Syphilis primitiva....	222	0	391	0	4 ·609	0 ·000
	,, consecutiva..	20	0				
	Gonorrhœa.....	86	0				
	Hernia humoralis............	59	0				
	Strictura urethræ..........	4	0				
Specific diseases.....	Atrophia........	12	2	81	4	0 .954	4 ·938
	Lepra..........	4	0				
	Dracunculus....	48	0				
	Scrophula.......	12	1				
	Beriberi........	5	1				
Diseases of the Eye..	Morbi oculorum	107	0	107	0	1 ·261	0 ·000
Do. Skin.	,, cutis......	187	1	187	1	2 ·204	0 ·000
	Other diseases...	1124	1	*1124	1	13 ·250	0 ·089
	Total....	5930	123	5830	123	69 ·904	2 ·071

† 14 cases of Cholera with 8 deaths in 1839.
87 do. do. 35 do in 1841.

NOTE.—Per centage of deaths to strength 1·500.

* Of this number were Phlogosis 460 and one death, and 311 cases of Ulcus.

Monthly abstract of a daily atmospherical Register kept at Cuddapah, from 1*st January to* 31*st December* 1836.

Months.	Mean height of the Thermometer.	Extremes of Thermometer.		General Remarks.
		Max.	Min.	
January........	75° 5	86° 0	65	During the month the wind blew uniformly and steadily from the north east; some dew deposited, occasional fogs in the morning, the weather calm and pleasant.
February..	77° 0	88° 0	66° 0	Wind from west, and light to the middle of the month, when it became variable, and strong, latterly it veered to east and by north, with white clouds.
March.	81° 0	93° 0	69° 0	East and north east winds prevailed, strong, and hot occasionally, with some clouds, rain on the 25th. The thermometer ranged under a thermantidote, 84° to 86°.
April..	86° 0	96° 0	76° 0	Wind chiefly east but variable, nights close and hot, when the thermometer stood at 90° with open doors, some rain on 25th with thunder.
May.............	88° 5	98° 0	79° 0	Wind still variable until the 3rd, when the regular hot winds set in from the west, nights hot and close.
June............	87° 0	95° 3	79 1	Until the 10th the wind continued to be variable, when the south west monsoon set in, with much thunder and rain.
July............	83° 5	94° 0	73° 0	Wind continued south west, nights and days close with occasional rain, chiefly at nights. Fever prevailed about the latter end of the month.
August....	82° 2	92° 5	72° 0	Weather cool and cloudy, a heavy fall of rain on the 11th, and from the 20th, heavy and general rain—wind westerly and light.
September	81° 0	90° 0	72° 0	Wind variable generally from the west, no rain in the early part of the month, but from the 15th much rain fell, chefly during night with thunder.
October........	75° 5	89° 0	70° 0	No rain in the month, wind north east, nights cool, as also mornings evaporation rapid, clear and some clouds, and on the 31st a perfect hurricane all night, and torrents of rain, many trees blown down.
November.,....	77° 0	85° 0	67° 0	Weather very clear and pleasant within doors nights cool, much rain on the night of the 4th, a few showers afterwards during the month.
December......	81° 0	80° 0	65° 0	Weather calm and cool, no rain, some dew.

Monthly abstract of a daily atmospherical Register kept at Cuddapah, from 1st *January to* 31st *December* 1837.

Months.	Mean height of the Thermometer.	Extremes of Thermometer.		General Remarks.
		Max.	Min.	
January........	85° 5	86° 0	65	Weather nearly the same as last year.
February..	88° 0	89° 0	66° 0	Same as last year.
March.	87° 0	94° 0	69° 0	Do. do. do.
April..	83° 5	96° 0	75° 0	As last year.
May............	88° 0	98° 0	78° 0	As last year.
June............	87° 0	95° 0	79° 0	As last year, but nights intensely hot and close until the 18th, when a heavy fall of rain occurred from the south west, having been preceded by very strong wind sweeping along clouds of dust and sand, from the south west.
July............	83° 5	94° 0	73° 0	Weather the same as last year, but hot and close with occasional showers.
August....	85° 0	98° 0	72° 0	Up to the 10th nights intensely close, but days rather pleasant—heavy fall of rain with much thunder, on the 9th and 10th, lightning and drizzling rain, with little intermission from the 14th to 20th.
September.	82° 0	92° 0	72° 0	Wind north east. Intensely close both day and night.
October........	84° 5	89° 0	70° 0	Continued to be close at nights until the 22nd, when some slight rain fell—wind south west and cloudy up to the 27th, when a heavy rain fell at night, and cooled the weather, cholera prevailed at Cuddapah on the 4th.
November......	75° 5	84° 0	67° 0	Rain very heavy up to the middle of the month, which has not occurred for upwards of thirty years, probably about 30 inches fell, during which period cholera prevailed at Cuddapah and in the neighbouring villages, and to a less extent in the regimental lines.
December......	72° 5	80° 0	65° 0	Weather cool and calm, nearly the same as last year.

Jail. The jail stands nearly in the centre of the old fort; the site being slightly elevated and considered to be salubrious. It was erected in 1813, and consists of several buildings in separate and spacious enclosures, for the various classes of prisoners, viz. male and female convicts, prisoners waiting for trial, civil debtors, and the hospital; the whole being surrounded by a wall, at some distance, twelve feet high.

The cells are 48 in number, and of various sizes, the average dimensions being about 17½ by 7 feet; they are built *dos a dos*, and are low and terraced, with sloping tiled fronts, or verandahs; there is no wall between the interior terraced portion, and that which is tiled, and the latter is open, being strongly barred with wood. Many of the cells are on a level with the surrounding ground, the sewers however are well arranged, and the drainage is good, and all the cells are kept perfectly clean. The supply of water is abundant and good. The whole building is calculated to contain upwards of 600 prisoners.

For a description of the diet, clothing, labour &c. see statement at the end of the report.

The hospital which can accomodate 50 patients is a large building within the precincts of the jail, and is supposed to have been, in former times, a part of a khiledars residence. It is open in front, being only protected by a bamboo frame work, which is so contrived as to be easily lifted up or let down. The usual offices, and a place for the guard are attached, and the building is surrounded by a high wall.

In the following tables are shewn the nature of the diseases and amount of mortality, which have occurred amongst the inmates, during a period of ten years, from 1829 to 1839; they also exhibit the diseases classified, and point out the per centage of sick to strength, and of deaths to sick treated.

JAIL OF CUDDAPAH.

No. 15.—*Table exhibiting the number of Admissions and Deaths of the Convicted Prisoners, from each class of Disease for* 10 *years, from* 1829 *to* 1839, *exclusive of* 1831.

CLASSES.	DISEASES.	From 1829 to 1839. exclusive of 1831. Aggregate strength 3,905.				Admissions and deaths from each class of disease.				Total admissions from each class	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick treated.
		1st Half.		2d Half.		1st Half.		2d Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers......	Febrisephemera	116	4	83	4	399	43	429	41	828	84	21 ·203	10 ·147
	,, intermit quot.	254	27	305	29								
	,, remittens. ..	29	12	38	7								
	,, com : cont...	0	0	3	1								
	Cholera.........	81	28	122	66	81	28	122	66	203	94	5 ·198	46 ·305
Diseases of the abdominal viscera......	Diarrhœa.......	61	23	142	50	132	38	212	70	344	108	8 ·809	31 ·395
	Dysenteria acuta et chronica..	43	14	60	19								
	Colica..........	25	0	9	1								
	Dyspepsia......	3	1	0	0								
	Hœmorrhois....	0	0	0	0								
	Hepatitis.......	0	0	1	0								
Diseases of the lungs	Catarrhus......	10	4	5	2	12	5	13	6	25	11	0 ·640	44 ·000
	Asthma........	1	0	1	0								
	Phthisis pulmonalis.........	1	1	2	1								
	Pneumonia.....	0	0	4	2								
	Dyspnœa	0	0	1	1								
Diseases of the brain.	Apoplexia......	1	1	2	1	8	2	6	1	14	3	0 ·358	21 ·428
	Epilepsia.......	4	0	0	0								
	Paralysis.......	1	0	1	0								
	Amentia........	0	0	0	0								
	Mania..........	2	1	3	0								
	Delirium Tremens.........	0	0	0	0								
Eruptive fevers......	Variola.........	40	13	16	1	71	13	61	1	87	14	2 ·227	16 ·091
	Varicella........	31	0	0	0								
Dropsies....	Anasarca.......	39	27	41	30	41	27	42	30	83	57	2 ·125	68 ·674
	Ascites.........	2	0	1	0								
Rheumatic affections.	Rheumat. acutus et chronicus	68	3	89	8	68	3	89	8	157	11	4 ·020	7 ·006
Venereal affections ..	Syphilis primitiva..........	3	0	3	0	6	0	6	0	12	0	0 ·307	0 ·000
	,, consecutiva.	1	0	2	0								
	Hernia humoralis..........	2	0	0	0								
	Strictura urethræ....	0	0	1	0								
Specific diseases.....	Lepra..........	1	0	0	0	96	9	55	4	151	13	3 ·866	8 ·609
	Dracunculus,...	72	0	50	1								
	Atrophia.	0	0	1	0								
	Scrophula......	0	0	1	0								
	Beriberi........	23	9	3	3								
	Morbi oculorum	40	1	18	0	40	1	18	0	58	1	1 ·485	1 ·724
	,, cutis.......	60	0	75	0	60	0	75	0	135	0	3 ·457	0 ·000
	Other diseases..	654	6	851	11	654	6	851	11	*1505	17	38 ·540	1 ·129
	Total..	1668	175	1934	238	1668	175	1934	238	3602	413	92 ·240	11 ·465

* Of this number were Phlogosis 297 with 1 death, Ulcus 685 with 10 deaths, and 415 admissions from punitus which seldom exceeds two dozen lashes.

JAIL OF CUDDAPAH.

No. 16.—*Table exhibiting the Number of Admissions and Deaths of the Prisoners under Trial, from each class of Disease, for* 10 *years, from* 1829 *to* 1839, *exclusive of* 1831.

CLASSES.	DISEASES.	From 1829 to 1839 exclusive of 1831. Aggregate strength 2523.				Admissions and deaths from each class of disease.				Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
		1st Half.		2d. Half.		1st Half.		2d. Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers......	Febrisephemera	46	0	29	5	100	6	106	33	206	39	8 ·164	18 ·932
	,, intermit quot.	48	4	53	14								
	,, remittens.....	6	2	23	13								
	,, com: cont....	0	0	1	1								
	Cholera........	40	16	54	31	40	16	54	31	94	47	3 ·725	50 ·000
Diseases of the abdominal viscera.......	Diarrhœa	18	1	60	22	60	7	126	39	189	46	7 ·372	24 ·731
	Dysenteria acuta et chronica..	34	5	62	17								
	Colica..	6	1	3	0								
	Dyspepsia......	2	0	0	0								
	Icterus..........	0	0	1	0								
Diseases of the lungs.	Catarrhus......	0	0	1	1	1	0	7	6	8	6	0 ·317	75 ·000
	Asthma	0	0	1	0								
	Pneumonia.....	1	0	5	5								
Diseases of the brain.	Epilepsia	1	0	1	0	9	1	5	1	14	2	0 ·554	14 ·285
	Paralysis	2	1	0	0								
	Amentia	3	0	1	0								
	Mania..........	3	0	3	1								
Eruptive fevers......	Variola.........	2	0	7	2	17	1	9	2	26	3	1 ·030	11 ·538
	Varicella	14	0	1	0								
	Rubeola........	1	1	0	0								
	Erysipelas......	0	0	1	0								
Dropsies...	Anasarca.......	6	5	12	5	6	5	12	5	18	10	0 ·713	55 ·555
	Ascites.........	0	0	0	0								
Rheumatic affections.	Rheumat. acutus et chronicus	7	1	10	0	7	1	10	0	17	1	0 ·673	5 ·882
Venereal affections ..	Syphilis primitiva..........	3	0	7	0	4	0	12	0	16	0	0 ·634	0 ·000
	,, consecutiva..	1	0	0	0								
	Gonorrhœa.....	0	0	1	0								
	Hernia humoralis...........	0	0	2	0								
	Strictura urethræ..........	0	0	2	0								
Specific diseases.....	Dracunculus....	11	0	12	1	13	1	13	1	26	2	1 ·030	7 ·692
	Scrophula......	0	0	1	0								
	Beriberi........	2	1	0	0								
	Morbi oculorum	2	0	5	0	2	0	5	0	7	0	0 ·277	0 ·000
	,, Cutis....	44	0	38	0	44	0	38	0	82	0	3 ·250	0 ·000
	Other diseases..	79	4	96	1	79	4	96	1	*175	5	6 ·936	2 ·857
	Total..	382	42	493	119	382	42	493	119	875	161	34 ·680	18 ·400

* Of this number were Phlogosis 30, Ulcus 82 with 3 deaths.

Remarks on the preceding tables of diseases.

Amongst the convicts the strength annually has amounted to 390, and the admissions have been 360, or 92·240 per cent; the annual number of deaths during the same period has been 41, or 10·576 per cent on the strength; the total admissions being 3602, deaths 413, from an aggregate strength of 3905.

The most numerous admissions have been from *fevers, cholera, bowel complaints, rheumatism, phlegmon, ulcers* and *punitus* in the class of other diseases; and the greatest mortality has resulted from *fevers, cholera, diarrhœa and dysentery, anasarca, rheumatism and beriberi.*

Amongst the prisoners waiting for trial, the admissions into hospital have principally been from *fevers, cholera, and bowel complaints;* and the mortality has been occasioned by the same diseases and *anasarca.* The total admissions have amounted to 875, with 161 deaths from an aggregate strength of 2523; the per centage of sick to strength being 34·680, and of deaths to strength 4·569.

In the following table No. 17, which has been drawn up similarly to that for the Bellary Jail, the annual admissions and deaths from the same diseases are exhibited, viz. fever, cholera, diarrhœa, dysentery, anasarca, rheumatism, atrophia, and beriberi. Here, as in the table alluded to, the total sick treated and mortality are also shewn, for the purpose of contrasting the proportion of deaths produced by these diseases; being 507 out of 574, or fully 7-8ths of the whole mortality.

	Table No. 17, Jail of Cuddapah.	1829.		1830.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		1839.		Total.	
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Convicts.	Fever	93	1	164	1	60	9	85	15	89	21	115	24	39	3	62	6	103	3	22	1	828	84
	Cholera	1	0	0	0	45	28	133	53	9	6	0	0	0	0	3	2	4	3	8	2	203	94
	Diarrhœa	7	1	16	0	15	1	93	42	21	16	14	5	4	2	9	4	4	1	17	1	203	73
	Dysentery	7	0	12	1	17	3	51	23	4	2	4	2	0	0	1	1	1	0	6	1	103	33
	Anasarca	1	0	0	0	6	5	31	19	28	26	3	1	3	3	8	3	0	0	0	0	80	57
	Rheumatism	26	1	31	0	24	1	27	2	12	1	4	0	2	0	4	3	17	2	10	1	157	11
	Atrophia	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	Beriberi	0	0	0	0	0	0	0	0	3	3	23	9	0	0	0	0	0	0	0	0	26	12
	Admissions and deaths from these diseases	135	3	224	2	167	47	420	154	169	75	163	41	48	8	87	19	129	9	63	6	1601	364
	Total admissions and deaths	387	4	652	6	385	50	696	165	342	93	277	43	188	12	243	21	241	10	191	8	3602	413
	Strength each year	310		375		463		553		668		512		309		335		169		211		3905	
under Trial.	Fever	11	0	19	1	27	4	56	25	0	0	10	0	9	2	8	1	42	2	24	4	206	39
	Cholera	0	0	0	0	7	3	77	38	0	0	0	0	0	0	0	0	0	0	10	6	94	47
	Diarrhœa	1	0	2	0	11	2	47	18	0	0	2	1	1	0	0	0	2	2	12	0	78	23
	Dysentery	5	0	5	0	16	2	64	20	0	0	0	0	0	0	0	0	1	0	5	0	96	22
	Anasarca	0	0	0	0	4	2	8	4	0	1	1	1	0	0	1	1	2	1	2	0	18	10
	Rheumatism	2	1	0	0	7	0	3	0	0	0	0	0	0	0	0	0	2	0	3	0	17	1
	Atrophia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Beriberi	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	2	1
	Admissions and deaths from these diseases	19	1	26	1	72	13	255	105	0	1	15	3	10	2	9	2	49	5	56	10	511	143
	Total admissions and deaths	56	2	67	1	126	14	303	116	0	2	33	3	31	2	36	2	91	15	132	14	875	161
	Strength each year	209		209		268		536		441		182		135		109		163		271		2523	
	Admissions and deaths amongst both classes of prisoners	443	6	719	7	511	64	999	281	342	95	310	46	219	14	279	23	332	15	323	22	4477	574
	Total Strength each year	519		584		731		1089		1109		694		444		444		332		482		6428	
	Per centage of deaths to strength	1	·516	1	·198	8	·755	25	·894	8	·566	6	·628	3	·153	5	·180	4	·518	4	·568	8	·929
	Per centage of sick to strength	85	·356	123	·116	69	·904	91	·735	30	·838	44	·668	49	·324	62	·837	100	·000	67	·012	69	·648
	Per centage of death to sick treated	1	·354	0	·973	12	·524	28	·128	27	·777	14	·838	6	·392	8	·243	4	518	6	·811	12	·821

Thus it will be seen that nearly one half of all the mortality amongst both classes of prisoners occurred in 1833, the year of famine, which was severely felt over the whole of this Collectorate. Almost all the prisoners admitted into the jail in that year, were extremely enfeebled and emaciated from *starvation*, and the mortality was confined almost exclusively to them. The following extract from the medical officers report gives a melancholy account of their condition.

" One hundred and two cases of fever were admitted, 29 of which were of the remittent and 73 of the intermittent types: sixteen of the former and eighteen of the latter terminated fatally. Those patients who died of the remittent form were all either old and attenuated or afflicted with cough; none of them survived a week, few lived even to the third day. Of those who died of the intermittent type, eight were between 50 and 60 years of age, two had but recently recovered from cholera, one had dropsy, and seven were harassed with cough; all of them sunk finally under diarrhœa."

" Sixty six cases of dysentery were admitted, and 28 proved fatal; none of these cases were attended with fever, and but few of the patients complained of griping pain or tenderness of abdomen; the tenesmus however was always distressing, especially towards the latter stage of the disease, when the dejections which consisted of blood and mucus, became more scanty and frequent; its course to a fatal termination was peculiarly rapid in very many of the cases."

" One hundred and fourteen cases of diarrhœa were received into the hospital, of which number fifty four proved fatal; many died within the first week; all of these patients were exceedingly emaciated, and had been literally starving before they came into the jail. The alvine discharges were not frequent, nor did they ever assume the dysenteric character, although after death the colon was often found in an ulcerated state; in many instances cough with pain of chest were complained of, and the lungs in such cases were found extensively diseased and tuberculated."

As it may be interesting to shew in a tabular form the relative healthiness of this and the Bellary jail the following table has been framed, in which are exhibited the admissions and deaths from the most important diseases, the total sick and mortality, the number of prisoners and the per centage of deaths to strength each year. The returns for 1831, for both jails have been lost; but it has been ascertained, that the number of deaths at Bellary, in that year was 30 (one from cholera) from an aggregate strength of 681, and at Cuddapah they amounted to 80, (thirty eight of which were from cholera,) from an aggregate strength of 613. These figures being added to the respective sums in the last column of the table, give 6·299 as the average per centage of deaths to strength at Bellary, and 9·287 at Cuddapah.

The two stations differ widely from each other in many respects, viz. geographical position, elevation above the level of the sea, nature of the adjoining country and mode of cultivation followed in the immediate neighbourhood, as already noticed; and the marked prevalence of fever and its sequelæ especially dropsies from visceral disease in the Cuddapah jail can be thus satisfactorily explained. The frequent severe visitations of cholera in this jail cannot fail to attract observation, whilst with the exception of the outbreak of this disease in 1837, the jail at Bellary may be said to have been free from it during the entire period, from 1829 to 1839 inclusive.

Another disease, the prevalence of which in the Bellary jail in 1833 and at Cuddapah in 1825, requires notice, viz. *beri-beri*; its appearance in either jail is not easily accounted for. The extract however from the medical officer's report page 26, dated December 1832, bears upon the subject and partly explains it, the same remarks apply to many of the cases which occurred in 1833, and also to those in the Cuddapah jail in 1835; nor can it be overlooked that in this jail only two cases were entered under the head *Anasarca* in 1833, and in 1835, in that of Cuddapah, only four appear under the same head. The debilitated state in which most of the prisoners were brought into jail in 1833, from actual starvation, predisposed to or induced œdema, which in some cases, was attended with partial paralysis, and in others, from long continued and great exposure, with rheumatic pains likewise.

Table No. 18.—Jail of Bellary and Cuddapah contrasted.

		1829.		1830.		1832.		1833.		1834.		1835.		1836.		1837.		1838.		1839.		Total.	
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.
Jail of Bellary.	Fever	40	1	92	6	109	9	55	14	71	8	80	10	63	8	25	7	14	3	13	2	564	68
	Cholera	0	0	0	0	0	0	5	4	0	0	0	0	0	0	28	22	0	0	1	1	34	27
	Diarrhœa	20	1	10	3	26	8	17	9	54	34	9	4	7	2	10	5	7	4	5	3	165	73
	Dysentery	9	0	19	3	70	15	72	19	52	17	27	12	11	7	7	1	7	1	20	6	294	81
	Anasarca	4	2	2	1	9	8	2	2	0	0	6	2	1	0	3	1	0	0	1	0	28	16
	Rheumatism	14	0	13	1	23	3	23	5	31	9	28	2	11	0	4	0	12	1	14	0	173	21
	Atrophia	0	0	0	0	0	0	0	0	5	2	54	20	14	10	0	1	1	1	2	2	76	36
	Beriberi	0	0	0	0	1	0	89	44	9	7	01	0	0	0	0	0	0	0	0	0	99	51
	Admissions and deaths from these diseases...	87	4	136	14	138	43	263	87	222	77	204	50	107	27	77	37	41	10	55	14	1430	373
	Total admissions and deaths	243	5	373	16	404	52	502	108	625	98	512	61	266	33	126	42	113	12	173	20	3337	447
	Total Strength each year	420		535		687		948		1279		914		678		554		347		539		6901	
	Per centage of deaths to strength	1 ·190		2 ·990		7 ·569		11 ·392		7 ·662		6 ·673		4 ·867		7 ·581		3 ·458		3 ·710		6 477	
Jail of Cuddapah.	Fever	104	1	183	2	87	13	141	40	89	21	125	24	48	5	70	7	145	5	46	5	1034	123
	Cholera	1	0	0	0	52	31	210	91	9	6	0	0	0	0	3	2	4	3	18	8	297	141
	Diarrhœa	8	1	18	0	26	3	140	60	24	16	16	6	5	2	9	4	6	3	29	1	281	96
	Dysentery	12	0	17	1	33	5	115	43	4	2	4	2	0	0	1	1	2	0	11	1	199	55
	Anasarca	1	0	0	0	10	7	39	23	28	27	4	2	3	3	9	4	2	1	2	0	98	67
	Rheumatism	28	2	31	0	31	1	30	2	12	1	4	0	2	0	4	3	19	2	13	1	174	12
	Atrophia	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	Beriberi	0	0	0	0	0	0	0	0	3	3	25	10	0	0	0	0	0	0	0	0	28	13
	Admissions and deaths from these diseases...	154	4	250	3	239	60	675	259	169	76	178	44	58	10	96	21	178	14	119	16	2112	507
	Total admissions and deaths	443	6	719	7	511	64	999	281	342	95	310	46	219	14	279	23	332	15	323	22	4477	574
	Total Strength each year	519		584		731		1089		1109		694		444		444		332		482		6428	
	Per centage of deaths to strength	1 ·516		1 ·198		8 ·755		25 ·894		8 ·566		6 ·628		3 ·153		5 ·180		4 ·518		4 ·568		8 ·929	

KURNOOL.

The small principality, or *jagheer* of Kurnool, or Kurnoola, as it is called by the natives, containing about 1056 square miles in extent, was subdued by, and came under the British power in the year 1839, in consequence of the treasonable designs of the late Nabob.

Situation and general description.

The chief town of the district is of the same name, and is situated in 15° 48′ north latitude, and 72° east longitude, upon an angle of land formed by the junction of the rivers Henderry and Toombuddra; its elevation above the level of the sea is 900 feet. It is distant from Bellary 95 miles, from Hyderabad 128, and from Madras 300, the roads to which places are passable for wheeled carriages at all times.

In reference to the surrounding country, Kurnool is placed in a hollow, the view to the eastward being terminated by a low range of hills about five miles distant: on the west the ground gently rises for about a mile and a half, when the view abruptly terminates: on the north it also rises gently from the Toombuddra, to about the same distance; and on the south the view is bounded by a wedge shaped hill, about four miles distant. From the base of this hill the country slopes gently to the Henderry and Toombuddra; the general aspect of the country when not under cultivation, is bare and uninviting, owing to the numerous loose stones which cover the surface in every direction, and the almost total absence of trees; in the latter respect it must have greatly altèred within the last 30 years, as both Hamilton and Annesley speak of the number of palmira trees to be seen.

Rivers.

The Toombuddra, upon the south bank of which the fort and pettah are built, rises in the western ghauts, and shortly after receiving the Haggaree, becomes the boundary stream between the Kurnool country and the Dooab; it then runs in a direct course east until it reaches Kurnool, where it unites with the Henderry, and winding to the northward falls into the Kistnah at Coodely-sungham, about 15 miles below the town.—The rise of its waters is very sudden, and its fall is equally rapid, but for the greatest part of the year it is a turbid stream: the bed consists of sand and pebbles, and opposite the town it is very rocky. The banks are low, and when full it is about 900 yards in breadth, having a depth of water, of from 15 to 25 feet; the stream is rapid, but is fordable from the end of December to the end of May, when it becomes clear, and is then 300 yards in breadth, and little more than knee deep; but it may be crossed at all seasons in basket boats, which are kept in readiness at the Kurnool ford.

The Henderry is a small rapid river which has its source to the south west of Kurnool, it also rises and falls very suddenly; its bed is of yellow sand and rock, and though occasionally not fordable, it is for several months of the year a mere brook.

Fifteen miles to the north of Kurnool is the ford of the Kistnah, on the high road to Secundrabad, and though not so broad as the Toombuddra, the river is deeper; its banks are higher, and when the rains fall in the western ghauts, the volume of water laden with mud, trunks of trees, &c. which rushes down, is very great; its bed is of sand and stones, it is fordable at the same season as the Toombuddra, and like it may at all times be crossed in basket boats.

After the subsiding of the Henderry and Toombuddra, in November, extensive sand banks are left, on which, besides vegetables of different kinds, melons of superior quality are grown. The melon beds are made by digging trenches about the beginning of December, and mixing regur or black soil with the sand, and the fruit becomes ripe about the middle of February. When the Toombuddra is first flooded the melon beds are all swept away, and a stratum of mud is deposited on the sand, close to the walls of the fort and pettah, this however soon dries, and by subsequent rising of the river is swept away.

Climate. The climate of Kurnool is considered to be healthy. The mean temperature according to Captain Newbold, is about 80°. The prevailing winds are west, and north east. The following observations have been drawn up from a residence of a few months at the station. April, May and part of June, are very hot; in the two former months, the thermometer in the house, ranges from 86° to 98°, the wind being westerly. In July the temperature varies from 75° to 87°, the first half of the month is cloudy, with strong westerly breezes, the other showery, with west winds. In August, frequent showers, and occasionally heavy rain, with thunder and lightning occur, the wind being west; and the thermometer ranging from 82° to 87°. September, cloudy and hazy in the mornings, the evenings close, with occasional rain, thermometer from 76° to 88°. October weather the same as in September till the 12th, or about the middle of the month, when the wind changes to north east. November is occasionally cloudy, but for the most part clear and bracing, thermometer, from 76° to 82°. December, one or two rainy days occur but for the most part it is clear and bracing, thermometer 64° to 78, wind north-east.

Soil. The prevailing soil is black cotton ground lying upon limestone, which is intersected by trap dykes, and is seldom more than eight or ten inches in depth, the surface being covered with limestone schale, but in the vicinity of the hills, it is red and sandy. The hills which are near the town are of sandstone, and sandstone conglomerate, passing into arenaceous schists.

Staple productions. The staple productions in the vicinity of the town, are sugar, cotton, jouaree, coolty, chinna, runganee, moung, nurssoor, and tobacco; and also a variety of vegetables and fruits, as carrots, turnips, onions, beet, beans, peas, brinjals, radishes, cabbages, lettuces; plantains, oranges, lemons, pineapples, pomegranates, peaches, mangoes, and melons. Of the vegetable productions of the Materia Medica, there are found the ricinus communis, croton tiglium, cucumis colocinthidis, datura stramonium, dolichos pruriens, punica granatum, sinapis alba, piper cubeba, cassia fistula, rosa centifolia, ruta graveolens, atropa belladonna, amomum zingiber, coriandrum sativum, ficus carica and citrus medicus.

A good sort of pony is bred at Kurnool, and the game fowls are remarkable for their beauty and courage.

Several kinds of excellent fish are found in the Toombuddra, the chief of which are carp and murrell.

Manufactures. Kurnool has its manufactures of muslins, stout calicoes, cotton carpets, gold and silver ornaments, copper and brass vessels, iron utensils, clay goglets, slippers, saddle cloths, indigo and arrack. European and Chinese goods, as well as the produce of the district, are to be obtained in the shops, and many useful as well as medicinal articles in the bazaars.

Inhabitants, customs of. The Patans of Kurnool are a handsome race, polite, and courteous in manners and address, and fond of horsemanship, cock-fighting and ram-fights. The better sort live well, animal food and wheaten cakes constituting a large portion of their food, but the poorer classes and labouring hindoos, subsist chiefly on rice, jouaree and bajree, with meat or fish occasionally. The poor all sleep upon cots, or char-paes. The inhabitants in general, notwithstanding they are said habitually to make use of opium and tobacco, attain to a good old age, though without any remarkable instances of longevity.

Fort of Kurnool. The fort built upon the base of the triangle before mentioned, is 879 yards in length from north to south, and 689 in breadth, from east to west; its walls are built of limestone and sand stone, are 17 feet high, and 9 feet thick; the northern and eastern faces are washed by the Toombuddra, and a deep and broad dry ditch runs from west to south.—

Several large circular bastions are placed at certain distances; there are three gate ways, one opening to the westward, another towards the Toombuddra on the east, and a third communicating with the pettah to the south. The fort is inhabited chiefly by the relatives of the late Nabob and their followers, by the government agents and subordinates, and by the officers of the native regiments stationed here; the houses are small having all formerly been native dwellings. The palace, cutcherry, barracks, arsenal and hospital, are also situated within the fort.

The soil in most parts is shallow; the limestone rock being found at a few inches in depth, and in some places projecting through the surface; notwithstanding this a great number of trees principally the banian, margosa and tamarind, grow in the compounds.

The fort is well drained by means of covered sluices communicating with the Toombuddra; and the inhabitants, in number 2,000, are said to be remarkably healthy.

Pettah or native town.

The pettah stretches from the south gate of the fort, to the point of the triangle, where the rivers meet; its sides are nearly equal, and it is about two miles and a half in circumference, surrounded by a wall 10 feet high, and a ditch, for the most part dry, but in some places filled with stagnant water. The houses in number amounting to 3854, are meanly built, and the streets narrow and badly drained, strangers being struck with the number of burial grounds, and grave stones to be seen, and with their neglected condition. The population amounts to 20,019—11,215 of whom are mahomedans. There is a good bazaar, and the police is under the jurisdiction of a british agent and magistrate.

The town is plentifully supplied with excellent drinking water from the rivers, but that procured from wells is brackish.

Regimental lines.

The regimental lines are situated on a plain, about 300 yards from the west gate of the fort, with which there is a communication by means of a cause-way. The parade ground is contiguous to the lines, and the village of Nova pettah lies between them and the Toombuddra, their length is 371 yards, from east to west, and 170 in breadth; the streets are wide and the houses good, but the drainage is bad, for want of a sufficient fall. The population is about 4,000, and that of Nova-pettah about 2,000.

The Russalah lines, are situated a little to the north of the Henderry, the houses are good and neat, the streets wide, and the drainage towards the river perfect; the number of troopers is 230.

Barracks. The barracks for the native infantry are situated in the fort, near the western gate, and close to the drill ground; the building is 170 feet long, with a verandah at each side, and is capable of containing 1026 stand of arms. In the fort there is also a barrack for 30 European artillery, with sergeants quarters, a cook room, congee house, privy, and a shed for guns.

Hospital. The hospital is near the east or water gate, and is a building of 52½ feet in length, by 29½ broad, and 10½ high; it is well ventilated and capable of containing 30 cots, as many however as 50 patients have been accommodated in it at one time; it lies north and south, and has a small yard in front surrounded by a wall four feet high, within which is a cook room and privy.

The surgery is a room of 19, by 17½ feet, communicating with the hospital. The situation of the hospital is rather confined, but a site has been marked out near the drill ground, where a new hospital is about to be erected.

Prevailing diseases. The prevailing diseases are cholera, small pox, fever and syphilis; a vaccine establishment has been kept up within the last four or five years. Several *hakeems* reside at Kurnool, whose knowledge is obtained from the writings of the old Arabian physicians, they are unacquainted with the circulation of the blood; and of anatomy they are very ignorant, but possess a copious materia medica.

Cholera was very fatal in 1843, in the pettah, having been apparently introduced by corps passing through, but for 10 or 12 years previous thereto, neither it, nor any other epidemic prevailed to any extent, though a few isolated cases, occurred each year.

One regiment of native infantry has been stationed here since 1840, and table No. 19, shews the nature of the diseases and amount of mortality which have occurred during a period of three years, from an aggregate strength of 3810 men.

No. 19.—*Table exhibiting the number of Admissions and Deaths amongst the native Troops stationed at Kurnool, during a period of three years, from* 1840 *to* 1842 *inclusive.*

Aggregate strength. 3810. CLASSES.	DISEASES.	Admitted.	Died.	Admissions from each class.	Deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers......	Febrisephemera	250	0	685	2	17 ·979	0 ·291
	,, intermit quot.	403	2				
	,, remittens.....	5	0				
	,, com: continua	27	0				
	Cholera.........	40	19	40	19	1 ·049	47 ·500
Diseases of the abdominal viscera......	Diarrhœa.......	78	0	202	5	5 ·301	2 ·475
	Dysenteria acuta et chronica.	53	5				
	Colica..........	5	0				
	Obstipatio......	6	0				
	Hœmorrhois....	9	0				
	Icterus.,........	1	0				
	Gastritis........	5	0				
	Hepatitis.......	2	0				
	Dyspepsia......	43	0				
Diseases of the Lungs	Catarrhus......	2	1	18	4	0 ·472	22 ·222
	Asthma.........	1	0				
	Phthisis pulmonalis..........	3	1				
	Pneumonia.....	10	1				
	Palpitatio	2	1				
Diseases of the Brain.	Apoplexia	1	0	11	0	0 ·288	0 ·000
	Paralysis.......	7	0				
	Mania...........	3	0				
Eruptive fevers......	Varicella........	44	0	57	0	1 ·496	0 ·000
	Rubeola........	13	0				
Dropsies...	Anasarca......	6	3	6	3	0 ·157	50 ·000
	Ascites.........	0	0				
Rheumatic affections.	Rheumatismus acutuset chronicus.........	236	2	236	2	6 ·194	0 ·847
Venereal affections...	Syphilis primitiva.........	111	0	168	0	4 ·409	0 ·000
	,, consecutiva...	6	0				
	Gonorrhœa.....	29	0				
	Hernia humoralis.........	21	0				
	Strictura urethræ..........	1	0				
Specific diseases.....	Lepra..........	2	0	50	1	1 ·312	2 ·000
	Beriberi........	2	1				
	Dracunculus....	21	0				
	Atrophia.......	17	0				
	Scrophula......	8	0				
	Morbi oculorum	51	0	51	0	1 ·338	0 ·000
	,, cutis....	71	0	71	0	1 ·863	0 ·000
	Other diseases..	445	1	*445	1	11 ·679	0 ·224
	Total....	2040	37	2040	37	53 ·543	1 ·813

---

* Of this number were Phlogosis 122, Ulcus 66. Per centage of deaths to strength 0·970.

GHOOTY.

General description of the Town and Hill fort of Ghooty.

Ghooty is distant, east from Bellary 54 miles by the road, its latitude is 15° 8″ north, and it is in 77° 42 east longitude; it consists of a cluster of fortified hills nearly surrounding a lower fort and native town; outside the fortifications are the remains of a military cantonment, and a considerable pettah.

Five principal roads lead to this station, viz. from Bellary on the west, Adoni on the north west, Kurnool on the north, Cuddapah on the south east, and Anantapore on the south. The country around is a plain nearly on the same level with Bellary, being 1182 feet above the sea, with many rocky hills rising abruptly from it; the soil is dry and gravelly near the hills, but in other situations it is chiefly black cotton ground.

The highest of the fortified hills, which is about double the elevation of any of the others, is 989 feet above the plain; it is a rock of sienite, precipitous in its upper third, and strongly fortified. On the summit of this hill there are several buildings, now occupied by about 30 state prisoners confined here; there are also several tanks and reservoirs, the water of which is very good, and used by the prisoners.

About half way down the principal hill, on its north side, is a fortified shoulder of considerable extent, called Maha Ghooty, with barracks at one time occupied by a wing of a European regiment, but which are now falling to decay.

The other lower hills forming the cluster, are defended by round towers at certain intervals, connected by stone walls but now in several places broken down.

The town is in the centre of the cluster, and being protected by the hills, little besides a strong gate has been thought necessary for its security, the wall on each side, connecting the hills on its right and left.

The lower fort, as well as the pettah and cantonment lie upon the west side, and upon the east is the small village of Cottepettah, a tank and a few rice fields; to the south and north there is some dry cultivation intermixed with barren rocky tracts.

The old town of Ghooty consists principally of one main street leading from the lower fort gate, to the cause-way by which the ascent is made to Maha Ghooty, and the hill fort; it is now but thinly inhabited, and many of the houses as well as public buildings, are in ruins, there is a small hospital and quarters for a serjeant, which are in good repair.

The cantonment, at one time of considerable extent, is, with the exception of two or three houses, in ruins. There is a good parade ground between the officers houses and the hills, at the north end of which is a small place of arms and some store rooms, the sepoys' huts being in the immediate vicinity, upon good dry ground.

The pettah is of moderate size, having one principal street leading from the lower fort gate eastward on the Bellary road, for about half a mile. The houses are tolerably good, and it is well drained.

On the west side of the cantonment is a large tank with some wet cultivation, the bed of this tank is dry during the hot weather, and emits much effluvia. There is a smaller tank, though of considerable size, north of the pettah. Independent of these two principal reservoirs, there are numerous smaller tanks and wells dispersed around, the water of many of them being very good, but that of others brackish.

There is no stream of any importance near Ghooty, and but little wood to be seen; two thriving plantations of fruit and other trees, have however lately been made by the public authorities. On the north side of the pettah, and along the roads are many fine old bannian, tamarind, and neem trees.

The surrounding cultivation is confined chiefly to dry grain.

Ghooty contains 4,386 inhabitants, of whom 413 are brahmins, 237 koomtees, 1077 mussalmans, 2,411 soodras, 218 pariahs, and 40 christians. Their occupations are chiefly farming and weaving, but many are employed as artificers and merchants. All classes appear to attain a fair average length of life.

There are six *telloogoo,* one *tamil* and three *persian* schools, which are well attended.

A charitable establishment supported by the state, named "Munro's Choultry" in memory of the late Sir Thomas Munro, exists here.

The principal diseases amongst the inhabitants, are continued fever of a slight description, and cholera which at times appears in a very malignant form; guinea worm is also common.

Ghooty, formerly the head quarters of a brigade, including one European regiment, is now garrisoned by two companies of native infantry.

The sepoys enjoy excellent health; a few cases of fever, rheumatism, syphilis and other usual and simple affections, in general constitute the sick list. The place has been several times attacked by epidemic cholera of late, after the encamping of infected bodies of troops in its vicinity, but in none of these visitations has it prevailed to any great extent. The returns of sick not having been forwarded to the medical board office separately, the usual table of diseases cannot be given here.

CEDED DISTRICTS.

Table No. 1.—Return of sick of the European Troops, exhibiting the half yearly Admissions and Deaths from the principal diseases, and those which have been Epidemic or Endemic during the period of ten years, from 1829 *to* 1838.

Years.			Diseases.																													
			Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other complaints.	Strength each year.	Annual per centage of sick to strength.	Annual per centage of deaths to sick treated.	Annual per centage of deaths to strength.
1829	Admitted.	1st half.	935	0	0	0	12	0	0	20	75	0	0	57	44	20	0	58	3	0	171	88	0	116	3	0	55	213	923	204 ·767	0 ·687	1 ·408
		2d ,,	955	1	0	0	8	0	0	17	55	0	0	130	9	12	0	44	2	0	245	52	0	114	4	0	53	209				
	Died.	1st half.	5	0	0	0	0	0	0	0	2	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1				
		2d ,,	8	1	0	0	0	0	0	0	2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0				
1830	Admitted.	1st half.	708	0	0	0	22	0	0	22	31	0	0	60	16	3	0	34	0	0	158	64	0	108	4	0	27	159	919	161 ·262	1 ·282	2 ·067
		2d ,,	774	0	0	0	10	0	0	21	61	0	0	49	32	23	0	28	1	0	190	50	0	116	10	0	45	138				
	Died.	1st half.	9	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	3				
		2d ,,	10	0	0	0	0	0	0	0	5	0	0	0	0	2	0	1	0	0	0	0	0	0	1	0	1	0				
1831	Admitted.	1st half.	798	0	0	0	19	0	0	14	70	0	0	107	18	11	0	26	2	0	71	43	0	159	11	0	48	199	876	185 ·045	1 ·295	2 ·397
		2d ,,	823	0	0	0	6	0	0	36	70	0	6	39	3	4	0	31	2	0	147	44	0	186	12	0	40	197				
	Died.	1st half.	12	0	0	0	4	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	1	4	0	0	0				
		2d ,,	9	0	0	0	1	0	0	1	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	2				
1832	Admitted.	1st half.	706	0	0	0	1	0	0	23	13	0	5	144	11	0	0	12	0	0	38	36	0	183	13	0	15	212	853	163 ·657	1 ·361	2 ·227
		2d ,,	690	0	0	0	2	0	0	28	35	0	17	57	1	1	0	34	1	0	110	35	0	196	4	0	39	130				
	Died.	1st half.	12	0	0	0	0	0	0	0	1	0	0	0	0	0	0	5	0	0	0	0	0	0	2	0	0	4				
		2d ,,	7	0	0	0	1	0	0	0	3	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0				
1833	Admitted.	1st half.	887	1	0	0	77	0	0	63	28	0	13	140	0	0	0	32	5	0	121	39	0	159	23	0	25	161	867	205 ·767	3 ·251	6 ·689
		2d ,,	897	2	0	0	7	0	0	46	48	0	22	96	1	0	0	36	0	0	155	58	0	220	18	0	30	158				
	Died.	1st half.	43	1	0	0	32	0	0	1	2	0	0	1	0	0	0	2	0	0	0	0	0	0	3	0	0	1				
		2d ,,	15	2	0	0	5	0	0	1	3	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	1				
1834	Admitted.	1st half.	797	0	0	0	1	1	27	58	53	0	19	116	5	14	0	48	0	0	*83	31	0	139	27	0	62	113	762	244 ·881	1 ·554	3 ·805
		2d ,,	1,069	1	0	0	1	0	46	61	69	0	24	122	127	46	0	36	0	0	110	55	0	148	32	0	72	119				
	Died.	1st half.	11	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	1	0	0	3				
		2d ,,	18	1	0	0	0	0	0	1	4	0	0	1	0	3	0	4	0	0	0	0	0	0	1	0	0	3				
1835	Admitted.	1st half.	982	0	0	0	0	2	23	30	45	0	23	62	205	2	0	44	0	0	78	80	0	187	70	0	35	96	930	206 ·881	1 ·039	2 ·150
		2d ,,	942	0	0	0	0	2	47	35	36	0	13	92	161	0	0	27	0	0	80	92	0	131	40	0	49	137				
	Died.	1st half.	6	0	0	0	0	0	0	0	1	0	0	0	2	1	0	1	0	0	0	0	0	0	1	0	0	0				
		2d ,,	14	0	0	0	0	0	0	1	4	0	0	2	1	0	0	1	0	0	0	0	0	1	2	0	2	0				
1836	Admitted.	1st half.	787	0	0	0	0	4	31	21	20	0	6	93	78	1	0	34	1	0	44	86	0	153	42	0	50	123	995	177 ·889	2 ·090	3 ·718
		2d ,,	983	0	0	0	7	5	16	42	114	0	18	80	96	5	1	56	3	0	64	60	0	218	33	0	45	120				
	Died.	1st half.	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2				
		2d ,,	33	0	0	0	2	0	0	0	12	0	0	3	1	0	0	6	1	0	0	1	0	1	2	0	0	4				
1837	Admitted.	1st half.	735	1	0	0	1	2	6	18	27	0	5	93	15	2	0	56	0	0	37	65	1	231	31	0	39	105	1038	196 ·820	2 ·055	4 ·046
		2d ,,	1,308	0	0	0	38	4	36	37	106	0	2	340	19	1	0	85	0	0	76	90	0	97	45	0	76	256				
	Died.	1st half.	13	1	0	0	0	0	0	2	4	0	0	1	0	0	0	3	0	0	0	0	0	0	1	0	0	1				
		2d ,,	29	0	0	0	12	0	2	1	5	0	0	2	1	0	0	2	0	0	0	0	0	0	4	0	0	0				
183[illegible]	Admitted.	1st half.	1,478	0	1	0	5	14	27	62	109	0	18	391	14	0	1	72	0	0	39	124	0	95	83	0	106	317	857	258 ·576	1 ·218	3 ·150
		2d ,,	738	0	0	0	9	5	20	49	47	0	9	78	30	1	3	51	0	0	24	104	0	70	17	0	31	190				
	Died.	1st half.	15	0	0	0	2	0	0	0	1	0	0	2	0	0	0	3	0	0	0	0	0	0	3	0	0	4				
		2d ,,	12	0	0	0	3	0	0	1	3	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	1				

CEDED DISTRICTS.

Table No. 2.—Europeans—Abstract of the preceding Returns, shewing the Total number of Admissions, and Deaths, &c. from 1829 *to* 1838.

		Diseases.																								
	Admissions and deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea Worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other Complaints.
Aggregate strength. 9,020.																										
1829 to 1838. Admitted. 1st half.	8,813	2	1	0	138	23	114	331	471	0	89	1263	406	53	1	416	11	0	840	656	1	1530	307	0	462	1698
2d ,,	9,179	4	0	0	88	16	165	372	641	0	111	1083	479	93	4	428	9	0	1201	640	0	1496	215	0	480	1654
Total..	17,992	6	1	0	226	39	279	703	1,112	0	200	2346	885	146	5	844	20	0	2041	1296	1	3026	522	0	942	3352
Died. 1st half.	130	2	0	0	38	0	1	3	14	0	0	10	2	1	0	19	1	0	0	1	0	3	16	0	0	19
2d ,,	155	4	0	0	24	0	2	6	42	0	0	10	3	5	0	26	1	0	0	1	0	2	14	0	4	11
Total..	285	6	0	0	62	0	3	9	56	0	0	20	5	6	0	45	2	0	0	2	0	5	30	0	4	30
Average per centage of sick to strength.	199·467	0·066	0·011	0	2·505	0·432	3·093	7·793	12·328	0	2·217	26·002	9·811	1·618	0·055	9·356	0·221	0	22·627	14·368	0·011	33·547	5·787	0	10·443	37·161
Do. of deaths to sick treated.	1·584	100·0	0	0	27·433	0	1·075	1·280	5·035	0	0	0·852	0·564	4·109	0	5·331	10·0	0	0	0·154	0	0·165	5·747	0	0·424	0·894
Do. of deaths to strength.	3·159	0·066	0	0	0·687	0	0·033	0·099	0·620	0	0	0·221	0·055	0·066	0	0·498	0·022	0	0	0 022	0	0·055	0·332	0	0·044	0·332

CEDED DISTRICTS.

Table No. 3.—Return of sick of the Native Troops, exhibiting the half yearly Admissions and Deaths from the principal diseases, and those which have been Epidemic or Endemic during the period of ten years, from 1829 *to* 1838.

Years.			Diseases.																													
			Admissions and Deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other complaints.	Strength each year.	Annual per centage of sick to strength.	Annual per centage of deaths to sick treated.	Annual per centage of deaths to strength.
1829	Admitted.	1st half.	827	0	1	0	42	0	0	22	13	0	0	1	196	7	0	0	2	0	8	114	1	96	9	0	78	237	4774	33 ·431	3 ·320	1 ·110
		2d ,,	769	1	0	1	1	0	0	9	4	0	0	0	171	1	0	0	7	0	27	147	1	76	4	0	61	258				
	Died.	1st half.	37	0	1	0	19	0	0	0	0	0	0	0	3	2	0	0	0	0	0	2	1	1	3	0	0	5				
		2d ,,	16	1	0	1	1	0	0	1	0	0	0	0	4	1	0	0	0	0	0	1	1	0	1	0	0	4				
1830	Admitted.	1st half.	734	0	0	1	1	0	0	8	5	0	0	3	68	32	0	1	1	0	29	113	0	60	11	2	96	303	4998	28 ·631	2 ·585	0 ·740
		2d ,,	697	0	0	0	1	0	0	10	3	0	8	1	96	32	0	2	2	0	52	102	0	53	13	1	83	238				
	Died.	1st half.	21	0	0	1	1	0	0	0	0	0	0	1	2	2	0	0	2	0	0	1	0	1	2	2	1	5				
		2d ,,	16	0	0	0	0	0	0	2	0	0	0	0	5	0	0	0	1	0	0	0	0	0	3	1	0	4				
1831	Admitted.	1st half.	838	0	1	0	51	0	0	12	3	0	79	2	117	28	0	3	2	0	4	92	0	65	9	0	77	293	3879	34 ·905	4 ·062	1 ·417
		2d ,,	516	1	0	0	27	0	0	22	8	0	45	4	60	2	0	0	3	0	12	62	0	28	4	0	67	171				
	Died.	1st half.	28	0	1	0	17	0	0	0	2	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	5				
		2d ,,	27	1	0	0	15	0	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	5				
1832	Admitted.	1st half.	669	1	0	1	37	0	0	12	22	0	66	12	49	4	0	1	3	0	3	79	0	31	5	0	96	247	3222	49 ·503	2 ·821	1 ·396
		2d ,,	926	1	0	0	6	0	0	23	15	0	235	5	120	48	0	1	2	0	28	72	0	37	4	1	68	260				
	Died.	1st half.	34	1	0	1	16	0	0	0	0	0	0	0	2	1	0	0	1	0	0	6	0	0	2	0	0	4				
		2d ,,	11	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4				
1833	Admitted.	1st half.	978	2	0	2	177	0	0	38	24	0	233	4	33	2	0	0	4	0	8	56	0	39	16	0	73	267	3532	49 ·405	7 ·793	3 ·850
		2d .,	767	1	0	5	41	0	0	44	12	0	239	3	106	18	0	2	3	0	12	56	0	45	13	0	51	116				
	Died.	1st half.	104	2	0	1	83	0	0	0	4	0	1	1	0	1	0	0	0	0	0	0	0	0	4	0	0	7				
		2d ,,	32	1	0	1	20	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	4	0	0	4				
1834	Admitted.	1st half.	779	0	1	0	0	7	0	9	9	0	285	6	166	23	5	0	2	0	4	54	6	45	8	0	47	102	3009	73 ·811	1 ·266	0 ·930
		2d ,,	1,442	0	0	1	3	7	0	11	24	0	630	6	425	67	10	1	7	0	9	54	0	26	13	0	53	95				
	Died.	1st half.	16	0	0	0	0	0	0	0	0	0	2	1	1	5	0	0	0	0	0	0	0	0	4	0	0	3				
		2d ,,	12	0	0	1	1	0	0	1	0	0	0	2	1	2	0	0	0	0	0	0	0	0	4	0	0	0				
1835	Admitted.	1st half.	1,102	0	0	1	2	16	1	28	13	0	239	3	367	32	13	1	6	0	27	79	19	34	5	0	44	172	3361	75 ·929	0 ·862	0 ·654
		2d ,,	1,450	0	0	0	0	55	0	18	8	0	394	4	377	22	3	0	2	2	29	129	2	40	15	0	127	223				
	Died.	1st half.	12	0	0	0	0	0	0	1	0	0	1	1	3	1	0	0	1	0	0	0	0	0	3	0	0	1				
		2d ,,	10	0	0	0	0	0	0	0	1	0	0	1	2	1	0	1	0	0	0	2	0	0	1	0	0	1				
1836	Admitted.	1st half.	893	0	1	0	0	65	1	7	16	0	135	1	222	10	10	1	1	0	14	89	5	46	11	0	84	174	2739	62 ·322	1 ·230	0 ·766
		2d ,,	814	0	1	0	0	48	1	7	11	0	97	1	180	6	4	1	1	0	70	78	0	41	9	1	68	189				
	Died.	1st half.	14	0	0	0	0	0	0	2	0	0	1	0	6	2	0	0	0	0	0	0	0	0	1	0	0	2				
		2d ,,	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	2	1	0	1				
1837	Admitted.	1st half.	608	0	1	0	1	37	0	4	3	0	73	0	93	43	7	0	1	0	13	61	23	17	8	0	80	143	3150	42 ·920	2 ·884	1 ·238
		2d ,,	744	0	1	0	19	32	0	10	11	0	122	0	132	15	4	0	1	0	35	77	0	39	5	0	90	151				
	Died.	1st half.	24	0	0	0	0	0	0	0	0	0	0	0	3	12	0	0	0	0	0	2	0	0	2	0	0	5				
		2d ,,	15	0	0	0	6	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	3	0	0	2				
1838	Admitted.	1st half.	1,204	0	3	3	11	35	1	29	30	0	135	10	256	16	30	3	4	0	12	140	23	52	19	0	136	256	3335	67 ·496	6 ·441	4 ·347
		2d ,,	1,047	1	2	4	235	42	0	20	22	0	116	2	170	8	6	2	1	0	6	124	1	39	8	0	73	165				
	Died.	1st half.	36	0	0	1	8	0	0	0	2	0	0	2	5	5	0	1	0	0	0	4	0	0	4	0	0	4				
		2d ,,	109	1	1	0	93	0	0	0	0	0	0	2	3	0	0	1	0	0	0	1	0	0	4	0	1	2				

CEDED DISTRICTS.

Table No. 4.—Natives—Abstract of the preceding Returns, shewing the Total number of Admissions, and Deaths, &c. from 1829 to 1838.

	Diseases.																									
	Admissions and deaths.	Apoplexy.	Atrophy.	Beriberi.	Cholera.	Cutaneous diseases.	Delirium Tremens.	Diarrhœa.	Dysentery.	Elephantiasis.	Fever ephemeral.	,, continued.	,, intermittent.	,, remittent.	Guinea Worm.	Hepatic diseases.	Insanity.	Leprosy.	Ophthalmy.	Rheumatism.	Small pox.	Syphilis &c.	Thoracic diseases.	Ulcer phagedenic.	Wounds & injuries.	Other Complaints.
Aggregate strength. 35,999.																										
1829 to 1838. Admitted. 1st half.	8,632	3	8	8	322	160	3	169	138	0	1245	42	1567	197	65	10	26	0	122	877	77	485	101	2	811	2194
2d ,,	9,172	5	4	11	333	184	1	174	118	0	1886	26	1837	219	27	9	29	2	280	901	4	424	88	3	741	1866
Total..	17,804	8	12	19	655	344	4	343	256	0	3131	68	3404	416	92	19	55	2	402	1778	81	909	189	5	1552	4060
Died. 1st half.	326	3	2	4	144	0	0	3	8	0	5	6	26	31	0	1	4	0	0	16	1	2	26	2	1	41
2d ,,	255	4	1	3	139	0	0	6	4	0	1	5	18	5	0	2	3	0	0	6	1	1	24	3	2	27
Total..	581	7	3	7	283	0	0	9	12	0	6	11	44	36	0	3	7	0	0	22	2	3	50	5	3	68
Average per centage of sick to strength.	49·456	0·022	0·033	0·052	1·819	0·955	0·011	0·952	0·711	0	8·697	0·188	9·455	1·155	0·255	0·052	0·152	0·005	1·116	4·939	0·225	2·525	0·525	0·013	4·311	11·278
Do. of deaths to sick treated.	3·263	87·500	25·000	36·842	43·206	0	0	2·623	4·687	0	0·191	16·176	1·292	8·653	0	15·789	12·727	0	0	1·237	2·469	0·330	26·455	100·00	0·193	1·674
Do. of deaths to strength.	1·613	0·019	0·008	0·019	0·786	0	0	0·024	0·033	0	0·016	0·030	0·122	0·100	0	0·008	0·019	0	0	0 061	0·005	0·008	0·138	0·013	0·008	0·188

CEDED DISTRICTS.

No. 5.—*Table exhibiting the number of Admissions, and Deaths from each class of disease for 5 years.*

EUROPEAN TROOPS.

CLASSES.	DISEASES.	From 1834 to 1838. Aggregate strength 4582.				Admissions and deaths from each class of disease.				Total admissions from each class.	Total deaths from each class.	Average annual per centage of sick to strength.	Average annual per centage of deaths to sick.
		1st Half.		2d Half.		1st Half.		2d Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers......	Febris ephemera	71	0	66	0	1162	11	1264	16	2426	27	52 ·946	1 ·112
	,, intermit quot.	307	2	397	2								
	,, tertiana......	10	0	36	1								
	,, remittens.....	19	1	53	3								
	,, continua......	755	8	712	10								
	Cholera........	7	2	55	17	7	2	55	17	62	19	1 ·353	30 ·645
Diseases of the abdominal viscera.......	Dysenteria acuta	245	7	359	27	254	7	372	29	626	36	13 ·662	5 ·750
	,, chronica......	9	0	13	2								
	Diarrhœa.......	189	2	224	4	289	3	389	4	678	7	14 ·797	1 ·032
	Colica..........	11	0	21	0								
	Obstipatio.......	32	0	52	0								
	Hœmorrhois....	27	0	55	0								
	Enteritis........	4	0	1	0								
	Peritonitis......	0	0	0	0								
	Gastritis........	7	1	3	0								
	Dyspepsia.......	19	0	33	0								
	Hepatitis acuta.	233	7	228	12	254	8	255	14	509	22	11 ·108	4 ·322
	,, chronica......	21	1	27	2								
Diseases of the Lungs and Heart	Catarrhus......	174	1	73	1	253	6	167	10	420	16	9 ·166	3 ·809
	Asthma........	1	0	2	0								
	Phthisis pulmonalis..........	9	1	8	4								
	Hœmoptysis.....	5	0	3	1								
	Pleuritis.........	0	0	0	0								
	Pneumonia......	64	4	71	2								
	Carditis........	0	0	5	2								
	Palpitatio......	0	0	1	0								
	Dyspnœa.......	0	0	4	0								
Diseases of the Brain.	Apoplexia......	1	1	1	1	165	6	228	7	393	13	8 ·577	3 ·307
	Epilepsia.......	3	0	5	2								
	Paralysis.......	7	3	9	2								
	Cephalalgia....	40	1	44	0								
	Phrenitis........	0	0	1	1								
	Ictus solis......	0	0	0	0								
	Amentia........	0	0	0	0								
	Mania..........	0	0	3	1								
	Hydrophobia...	0	0	0	0								
	Delirium Tremens.........	69	1	88	1								
	Ebrietas........	45	0	77	1								
Diseases of the Eye..	Morbi oculorum...........	281	0	354	0	281	0	354	0	635	0	13 ·858	0
Do. ,, Skin	,, cutis........	23	0	16	0	23	0	16	0	39	0	0 ·851	0
Eruptive Fevers......	Variola.........	0	0	0	0	4	0	0	0	4	0	0 ·087	0
	Varicella........	1	0	0	0								
	Rubeola........	0	0	0	0								
	Scarlatina......	0	0	0	0								
	Erysipelas.......	3	0	0	0								
Dropsies....	Anasarca.......	0	0	1	0	3	1	7	0	10	1	0 ·218	10 0
	Ascites.........	3	1	6	0								
	Hydrothorax....	0	0	0	0								
Rheumatic affections.	Rheumatismus acutus........	295	0	265	1	386	0	402	1	788	1	17 ·197	0 ·126
	,, chronicus....	91	0	136	0								
	Neuralgia......	0	0	0	0								
	Odontalgia......	0	0	1	0								
Venereal affections..	Syphilis primitiva...........	386	0	282	1	802	1	661	1	1463	3	31 ·930	0 ·205
	,, consecutiva...	28	1	23	1								
	Gonorrhœa.....	345	0	298	0								
	Hernia humoralis..........	37	0	51	0								
	Strictura urethrœ.........	6	0	7	0								
Specific diseases.....	Atrophia........	1	0	0	0	11	0	7	0	18	0	0 ·392	0
	Beriberi.........	0	0	0	0								
	Elephantiasis...	0	0	0	0								
	Lepra..	0	0	0	0								
	Dracunculus....	4	0	4	0								
	Ulcus phagedenicum........	0	0	0	0								
	Scrophula......	6	0	3	0								
	Scorbutus......	0	0	0	0								
Punishment.	Punitus........	25	0	23	0	25	0	23	0	48	0	1 ·047	0
Wounds and injuries...	Fractura........	18	0	18	0	292	0	273	2	565	2	12 ·330	0 ·353
	Luxatio.........	8	0	1	0								
	Subluxatio......	31	0	28	1								
	Vulnus sclopitorum........	7	0	20	0								
	,, incisum......	39	0	34	1								
	Contusio......	186	0	170	0								
	Ambustio......	3	0	2	0								
Other diseases, including Phlogosis, Ulcus, &c..,...........		568	4	567	4	568	4	567	4	*1135	†8	24 ·769	0 ·704
	Total..	4779	49	5040	106	4779	49	5040	106	9819	155	214 ·295	1 ·578

Average per centage of deaths to strength, during these five years, has been 3·382.

* Of this number were

Phlogosis............	179	0
Do. do. Ulcus........	389	0
Do. do. Bubo simplex	246	1
Total....	814	1

† The deaths under this head, include besides the one accounted for in the preceding note, three from cynanche, two from splenitis and two not particularised.

CEDED DISTRICTS.

No. 6.—*Table exhibiting the Number of Admissions and Deaths, from each Class of Disease, for 5 years.*

NATIVE TROOPS.

CLASSES.	DISEASES.	From 1834 to 1838. Aggregate strength 15594.				Admissions and deaths from each class of diseases.				Totaladmissions from each class.	Total deaths from each class.	Average annual per centage of sick to strength.	Average annual per centage of deaths to sick.
		1st Half.		2d. Half.		1st Half.		2d. Half.					
		Ad.	Dd.	Ad.	Dd.	Ad.	Dd.	Ad.	Dd.				
Fevers......	Febrisephemera	867	4	1359	0	2115	51	2774	18	4889	69	31 ·351	1 ·411
	,, intermit quot.	958	16	1084	9								
	,, tertiana......	146	2	200	0								
	,, remittens....	124	25	118	4								
	,, com : cont....	20	4	13	5								
	Cholera........	14	8	257	100	14	8	257	100	271	108	1 ·737	39 ·852
Diseases of the abdominal viscera......	Dysenteriaacuta	55	2	58	1	71	2	76	1	147	3	0 ·942	2 ·040
	,, chronica.. ..	16	0	18	0								
	Diarrhœa.......	77	3	66	1	193	6	180	4	373	10	2 ·391	2 ·680
	Colica..........	11	1	8	0								
	Obstipatio.. ..	8	0	10	0								
	Hœmorrhois....	8	1	11	1								
	Enteritis........	0	0	0	0								
	Peritonitis......	0	0	0	0								
	Gastritis........	0	0	0	0								
	Dyspepsia......	89	1	85	2								
	Hepatitis acuta	4	1	3	2	5	1	3	2	8	3	0 ·051	37 ·500
	,, chronica....	1	0	0	0								
Diseases of the Lungs and heart.	Catarrhus......	13	1	11	1	51	14	51	14	102	28	0 ·654	27 ·450
	Asthma........	14	5	18	2								
	Phthisis pulmonalis..........	4	2	5	7								
	Hœmoptysis....	1	0	0	0								
	Pleuritis........	0	0	0	0								
	Pneumonia.. ..	14	4	13	2								
	Carditis........	1	1	1	1								
	Palpitatio......	0	0	0	0								
	Dyspnœa.......	4	1	3	1								
Diseases of the Brain.	Apoplexia......	0	0	1	1	43	1	50	2	93	3	0 ·596	3 ·225
	Epilepsia......	3	0	0	0								
	Paralysis......	9	0	13	0								
	Cephalalgia.. ..	13	0	23	0								
	Phrenitis.......	1	0	0	0								
	Ictus solis......	0	0	0	0								
	Amentia........	10	1	8	1								
	Mania..........	4	0	4	0								
	Hydrophobia...	0	0	0	0								
	Delirium Tremens.........	3	0	1	0								
	Ebrietas........	0	0	0	0								
Diseases of the Eye..	Morbi oculorum	70	0	149	0	70	0	149	0	219	0	1 ·404	0
Do. Skin.	,, cutis......	160	0	184	0	160	0	184	0	344	0	2 ·205	0
Eruptive fevers......	Variola.........	4	0	1	0	79	0	3	0	82	0	0 ·525	0
	Varicella.......	72	0	2	0								
	Rubeola..	3	0	0	0								
	Scarlatina......	0	0	0	0								
	Erysipelas......	0	0	0	0								
Dropsies....	Anasarca.......	15	3	12	0	19	7	15	1	34	8	0 ·218	23 ·529
	Ascites.........	2	1	2	0								
	Hydrothorax...	2	3	1	1								
Rheumatic affections.	Rheumat.acutus	244	2	254	1	426	6	462	4	888	10	5 ·694	1 ·126
	,, chronicus.....	179	4	205	3								
	Neuralgia......	0	0	0	0								
	Odontalgia......	3	0	0	0								
Venereal affections..	Syphilis primitiva...........	101	0	103	1	194	0	185	1	379	1	2 ·430	0 ·263
	,, consecutiva..	18	0	15	0								
	Gonorrhœa.....	30	0	27	0								
	Hernia humoralis............	42	0	39	0								
	Strictura urethræ.........	3	0	1	0								
Specific diseases.....	Atrophia........	6	0	4	2	89	2	54	4	143	6	0 ·917	4 ·195
	Beriberi........	4	1	5	1								
	Elephantiasis...	0	0	0	0								
	Lepra..........	0	0	2	0								
	Dracunculus....	65	0	27	0								
	Ulcus Phagedenicum........	0	0	2	1								
	Scrophula.......	13	1	13	0								
	Scorbutus......	1	0	1	0								
Punishment.	Punitus........	8	0	7	0	8	0	7	0	15	0	0 ·096	0
Wounds and injuries...	Fractura........	11	0	8	0	391	0	411	1	802	1	5 ·143	0 ·124
	Luxatio........	1	0	0	0								
	Subluxatio......	24	0	23	0								
	Vulnus sclopitorum..........	0	0	8	0								
	,, incisum..	44	0	31	0								
	Contusio	310	0	340	1								
	Ambustio	1	0	1	0								
Other diseases, including Phlogosis Ulcus &c.............		658	4	636	1	658	4	636	1	*1294	†5	8 ·298	0 ·386
	Total....	4586	102	5497	153	4586	102	5497	153	10083	255	64 ·659	2 ·529

Average per centage of deaths to strength during these five years, has been 1·635.

* Of this number were

Phlogosis............	650	1
Do. do. Ulcus.........	439	1
Do. do. Bubo simplex	112	0
Total....	1201	2

† The deaths under this head include besides those accounted for in the preceding note, one from tetanus, one from icterus, and one from hydrophobia.

CEDED DISTRICTS.

No. 7.—*Table exhibiting the Admissions and Deaths, from the most particular diseases, amongst the European and Native Troops in the Ceded Districts, during the ten years, from* 1829 *to* 1838 *inclusive, with the proportion each bears to the total number of Admissions and Deaths.*

	Cholera.		Fevers.		Dysentery.		Hepatitis.		Diarrhœa.		Thoracic diseases.		Rheumatism.		Syphilis.		Total from these diseases.	
	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.
Europeans.																		
Total Admissions....17,992	226	$\frac{1}{80}$	3577	$\frac{1}{5}$	1112	$\frac{1}{16}$	844	$\frac{1}{21}$	703	$\frac{2}{51}$	522	$\frac{1}{34}$	1296	$\frac{1}{14}$	3026	$\frac{1}{6}$	11306	$\frac{5}{8}$
„ Deaths........ 285	62	$\frac{2}{9}$	31	$\frac{1}{9}$	56	$\frac{1}{5}$	45	$\frac{1}{6}$	9	$\frac{1}{31}$	30	$\frac{2}{19}$	2	$\frac{1}{142}$	5	$\frac{1}{57}$	240	$\frac{5}{6}$
Natives.																		
Total Admissions....17,804	655	$\frac{1}{27}$	7019	$\frac{2}{5}$	256	$\frac{1}{69}$	19	$\frac{1}{937}$	343	$\frac{1}{52}$	189	$\frac{1}{94}$	1778	$\frac{1}{10}$	909	$\frac{2}{39}$	11168	$\frac{5}{8}$
„ Deaths........ 581	283	$\frac{1}{2}$	97	$\frac{1}{6}$	12	$\frac{1}{48}$	3	$\frac{1}{194}$	9	$\frac{1}{64}$	50	$\frac{2}{23}$	22	$\frac{1}{25}$	3	$\frac{1}{194}$	479	$\frac{5}{6}$

No. 8.—*The following table shwes the per centage of Admissions from the same diseases to the strength, of deaths to sick treated, and of deaths to the strength; it exhibits also the difference in these respects, amongst the European and Native sick.*

	Cholera.		Fevers.		Dysentery.		Hepatitis.		Diarrhœa.		Thoracic diseases.		Rheumatism		Syphilis.		Total from these diseases.		Grand Total.	
	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.	Ad. & deaths.	Per centage.
European Troops. STRENGTH, 9020.																				
Per centage of sick to strength	226	2·505	3577	39·655	1112	12·328	844	9·356	703	7·793	522	5·787	1296	14·368	3026	33·547	11306	125·343	17992	199·467
„ of deaths to sick treated.	62	27·433	31	0·866	56	5·035	45	5·331	9	1·280	30	5·747	2	0·154	5	0·165	240	2·122	285	1·584
„ of deaths to strength....	62	0·687	31	0·343	56	0·620	45	0·498	9	0·099	30	0·332	2	0·022	5	0·055	240	2·660	285	3·159
Native Troops. STRENGTH, 35999.																				
Per centage of sick to strength	655	1·819	7019	19·497	256	0·711	19	0·052	343	0·952	189	0·525	1778	4·939	909	2·525	11168	31·020	17804	49·456
„ of deaths to sick treated.	283	43·206	97	1·381	12	4·687	3	15·789	9	2·623	50	26·455	22	1·237	3	0·330	479	4·736	581	3·263
„ of deaths to strength....	283	0·786	97	0·269	12	0·033	3	0·008	9	0·024	50	0·138	22	0·061	3	0·008	479	1·330	581	1·613

CEDED DISTRICTS.

No. 9.—*Table shewing the amount of Admissions and Deaths from the principal classes of disease, for the period of five years, from* 1834 *to* 1838 *inclusive, with the proportions of admissions from each to the total of sick treated, and of deaths to the total mortality.*

	Fevers.		Cholera.		Dysentery.		Abdominal complaints.		Diseases of the Liver.		Diseases of the Lungs.		Diseases of the Brain.		Dropsies.		Rheumatic affections.		Venereal complaints.	
	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.	Ad. & deaths.	Prop.
European Troops.																				
Total Admissions......9819	2426	$\frac{1}{4}$	62	$\frac{1}{158}$	626	$\frac{2}{31}$	678	$\frac{1}{14}$	509	$\frac{1}{19}$	420	$\frac{1}{23}$	393	$\frac{1}{25}$	10	$\frac{1}{982}$	788	$\frac{1}{12}$	1463	$\frac{1}{7}$
„ Deaths.......... 155	27	$\frac{1}{6}$	19	$\frac{1}{8}$	36	$\frac{1}{4}$	7	$\frac{1}{22}$	22	$\frac{1}{7}$	16	$\frac{1}{9}$	13	$\frac{1}{12}$	1	$\frac{1}{155}$	1	$\frac{1}{155}$	3	$\frac{1}{51}$
Native Troops.																				
Total Admissions....10083	4889	$\frac{1}{2}$	271	$\frac{1}{37}$	147	$\frac{1}{68}$	373	$\frac{1}{27}$	8	$\frac{1}{1260}$	102	$\frac{1}{99}$	93	$\frac{1}{108}$	34	$\frac{1}{297}$	888	$\frac{1}{11}$	379	$\frac{1}{27}$
„ Deaths........ 255	69	$\frac{1}{4}$	108	$\frac{3}{7}$	3	$\frac{1}{85}$	10	$\frac{1}{25}$	3	$\frac{1}{85}$	28	$\frac{1}{9}$	3	$\frac{1}{85}$	8	$\frac{1}{32}$	10	$\frac{1}{25}$	1	$\frac{1}{255}$

No. 10.—*Table exhibiting the per centage of admissions from the same classes of disease to the strength, of deaths to sick treated, and of deaths to strength, both amongst European and Native troops.*

	Fevers.		Cholera.		Dysentery.		Abdominal complaints.		Diseases of the Liver.		Diseases of the Lungs.		Diseases of the Brain.		Dropsies.		Rheumatic affections.		Venereal complaints.	
	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.	Ad. & deaths.	Per cent-age.
European Troops.																				
STRENGTH.......4582																				
Percentage of sick to strength	2426	52·946	62	1·353	626	13·662	678	14·797	509	11·108	420	9·166	393	8·577	10	0·218	788	17·197	1463	31·930
„ of deaths to sick........	27	1·112	19	30·645	36	5·750	7	1·032	22	4·322	16	3·809	13	3·307	1	10·000	1	0·126	3	0·205
„ of deaths to strength....	27	0·589	19	0·414	36	0·785	7	0·152	22	0·480	16	0·349	13	0·283	1	0·021	1	0·021	3	0·065
Native Troops.																				
STRENGTH... ..15594																				
Percentage of sick to strength	4889	31·351	271	1·737	147	0·942	373	2·391	8	0·051	102	0·654	93	0·596	34	0·218	888	5·694	379	3·430
„ of deaths to sick........	69	1·411	108	39·852	3	2·040	10	2·680	3	37·500	28	27·450	3	3·225	8	23·529	10	1·126	1	0·263
„ of deaths to strength....	69	0·442	108	0·693	3	0·019	10	0·064	3	0·019	28	0·179	3	0·019	8	0·051	10	0·064	1	0·006

REMARKS ON THE GENERAL TABLES.

Remarks on the General tables of disease.

The general table No. 1, for European troops includes the sick of H. M.'s regiments, and of one company of artillery at Bellary, the only place in the division occupied by European troops. It exhibits the admissions into hospital, and the mortality from the most important diseases, each half year, for a period of ten years from 1829 to 1838 inclusive, as in the preceding reports. The annual per centage of sick to strength, of deaths to sick, and of deaths to strength, are also given; the average of these, as exhibited in the abstract table No. 2, being 199·467, 1·584, and 3·159 respectively.

In the years 1834 and 1838, the admissions into hospital were considerably above the average, occasioned in the former period principally by fever, and in 1838, by ophthalmic disease also. The mortality exceeded the average in 1838 and 1837; in both years almost exclusively the result of epidemic cholera in H. M.'s 55th and 41st regiments, when in barracks at Bellary.

During the ten years, the total admissions have been 17,992 and the total deaths in hospital 285, from an aggregate strength of 9,030 men.

The most prevalent diseases have been *fevers, syphilis, ophthalmia, rheumatism, dysentery, hepatitis, diarrhœa and thoracic diseases;* and the greatest mortality has resulted from *cholera, dgsentery, hepatitis, fever and thoracic diseases;* the per centage from each of which is noted in the table No. 2.

The admissions are pretty equal during each of the half yearly periods (table No. 2;) but the mortality is slightly increased during the second half yearly period from dysentery hepatitis and fever.

Tables No 3 and 4, shew the amount of the same diseases, and mortality which have occurred amongst the native troops at the head quarters of the division and at Cuddapah and Ghooty, during the same period of years. The total admissions have been 17,804, and 581 deaths have occurred from an aggregate strength of 35,999 men; the average per centage of sick to strength being 49·456, of deaths to sick treated 3.263 and of deaths to strength 1·613.

The admissions were considerably above the average in 1834, 35, 36, and 1838, principally from fever, and in the last mentioned year, partly from cholera also; the mortality was greatly above the average in 1833 and 1838, the result in both years of epidemic cholera, and which occurred almost exclusively in corps while marching in the division; e. g. the 17th regiment N. I. in January 1833, *en route* to Cuddapah, lost 63 men, out of 144 attacked; the 16th regiment N. I. in October, on its march from Palavaram to Cuddapah, buried 55 men, 125 having been attacked; and the 52d regiment in the same month of that year while marching through the western part of the division, lost 22 men out of 80, who were attacked with this disease. Again, in January 1829, the 28th regiment N. I. while marching through this division, *en route* to Jaulnah, suffered rather severely from cholera, and buried 19 men, out of 42 attacked; in 1831, the 45th regiment was attacked with the disease while marching to Palavaram, and buried 8 out of 41, and lastly in 1832, out of the number of admissions and deaths under this head in the general table No. 3, no less than 36 with 16 deaths occurred in the 14th regiment, in the month of April, while marching in the division.

The most prevalent diseases, as shown in table No. 4, have been *fevers, rheumatism, syphilis, cholera, dysentery, diarrhœa* *and ophthalmia;* and the most fatal have been *cholera, fever, thoracic diseases, rheumatism and dysentery.*

The tabular statements No. 7 and 8, have been framed similarly to those given in the preceding divisions, from the abstract returns No. 2 and 4, and exhibit much interesting information relative to the corresponding diseases amongst both European and native troops.

In the Tables No. 5 and 6, are exhibited the admissions and deaths from each disease, in the various classes therein given, during a period of five years from 1834 to 1838, as in the preceding reports; the total admissions from each class, and the mortality are also shewn, and the per centage of sick to strength, and of deaths to sick treated. The total admissions amongst the European troops amount to 9,819, with 155 deaths, from an aggregate strength of 4,582; the per centage of admissions to strength being 214·295, of deaths to sick treated 1·578, and of deaths to strength 3.382; the difference in these respects, from the results in the preceding table for ten years, is very trifling.

The total admissions amongst the native troops, during the same period of five years, (table No. 6) have amounted to 10,083, and 255 deaths have occurred from an aggregate strength of 15,594 men; thus giving 64·659 as the annual admissions for every 100, and 2·529 deaths per cent on the sick treated; while during the same period, the per centage of deaths to strength has been 1·635.

The tabular statements No. 9 and 10, exhibit at one view the proportion and per centage of admissions and deaths from the principal classes of disease, both amongst the European and native troops.

Fever is the most prevalent disease amongst the European troops at Bellary; but fortunately it is not of a bad character, and cases of the remittent type, except in certain seasons, are comparatively rare; the continued and intermittent forms are most prevalent. Fevers prevail principally in November and December, gradually decline in January, February and March, and occur but rarely in the other months of the year.

Continued fever, (see table No. 2) forms a large proportion of all the admissions, nearly 1-8th part; the principal cause to which it is ascribed, by the medical officers in charge of the European troops, are irregular habits, exposure to the heat of the sun during the day, and to cold at night when on guard. In many instances this fever assumes an acute inflammatory character, with local determination to the head and chest, the latter complication occurs chiefly in the cold season, and in such cases very active antiphlogistic treatment is requisite; at other seasons low typhoid symptoms occasionally appear in the course of the disease.

Intermittents are principally of the quotidian type, and as already mentioned, the cause is not clearly evident or easily discovered, as there is no rank vegetation or marshy ground near the station. The existence and marked prevalence of this form of fever at Bellary, may therefore tend to favour the opinion that the disintegration or decomposition of rocks, gives rise to, or is attended with the evolution of miasm, or a gaseous fluid of a deleterious nature, the cause of this fever; or, that the noxious effluvia may be exhaled from the black cotton soil. It is proper however to observe, that the late Staff Surgeon Smith, who had been many years at this station, has recorded in his report dated 1836, "that he never knew an instance of a European officer being seized with an original attack of intermittent fever at Bellary" and he adds "that the chief exciting causes of this disease amongst the soldiery, must be looked for in their careless imprudent habits, and exposure at night.

Dysentery occurs chiefly during the wet weather in July and August, but the cases are not numerous, and those only who are highly predisposed to it, appear to be attacked by this disease at Bellary.

Cases of hepatitis occur pretty equally throughout the year, but rather more frequently inJuly and August, than in the other months.

Cholera when it visits this place, almost always appears in the hot dry months,and the most severe epidemic attacks have occurred in seasons in which there has been a marked deficiency in the usual fall of rain ; and another irregularity in the usual course of the season, which has been several times remarked previous to an outbreak of this disease, is the absence of thunder.

Much has been said and written, relative to the frequency of the appearance of cholera at Bellary, and the great mortality occasioned by it amongst the European troops. Table No 2, framed from the monthly returns from the division, shews exactly, the number of cases and deaths which have occurred each year ; and the following table No. 20, exhibits at one view, the total number of cases of cholera treated in hospital, and the mortality which it has occasioned in each division of the army, for a period of ten years, from 1829 to 1838 inclusive ; the strength is likewise given, and also the per centage of admissions to strength, of deaths to sick treated, and of deaths to strength. The average in these respects for the same period, from the grand total of the European army, is placed in the first column, which at once points out the excess or otherwise, in each of the several divisions ; and the last line of the table, in which is given the per centage of deaths to strength, gives each division its place as to the relative amount of mortality produced by this disease. It will be seen, that Bellary is below the average, and that it stands 6th.

Again, as regards the general healthiness of the European troops at Bellary, compared with the other divisions of the army, the table has been extended for the purpose of exhibiting the total admissions and mortality in each division, during the same period; in which it will be seen, (table No. 21) that the ratio of deaths to strength at Bellary is considerably below the average; and in this point of view it stands 2nd in the scale.

But although this station may be considered a very healthy one for European troops, yet the sick list is generally high, and this arises principally from the frequency of venereal cases, and ophthalmic diseases; rheumatism also forms a considerable portion of the sick in hospital. This latter disease appears more frequently in the months of January, February, March and April, and in August and November, than in the other months of the year.

The marked prevalence of ophthalmia is attributed to the extreme dryness of the atmosphere, to the excessive glare and reflection from the numerous large masses of granite in the lower fort, the light colour of the ground and numerous white washed buildings, and to the fine white sandy nature of the soil. The disease commonly appears in the form of the mild purulent ophthalmia, but occasionally the deeper seated parts of the eye are involved, giving rise in such cases to opacity of the cornea, and in some rare instances to destruction of the organ. After depletion the most useful remedies have been found to be the nitrate of silver, and sulphate of copper.

Table No 20.	Grand Total.	Bellary.	Mysore.	Cannanore.	Southern Division	Centre ,,	Presidency.	Northern Division	Hydrabad.	Nagpore.	Tenasserim.
Strength..................	103431	9020	15590	7959	8922	12402	13981	6334	10557	9574	9092
Admissions from Cholera.	2833	226	641	76	256	493	392	326	234	153	36
Deaths from Cholera......	770	62	92	13	75	194	136	99	43	39	17
Per centage of Admissions to strength..............	2 ·739	2 ·505	4 ·111	0 ·954	2 ·869	3 ·975	2 ·803	5 ·146	2 ·216	1 ·598	0 ·395
Per centage of deaths to sick treated..............	27 ·179	27 ·433	14 ·336	17 ·105	29 ·296	39 ·350	34 ·693	30 ·368	18 ·376	25 ·490	47 ·222
Per centage of deaths to strength.	0 ·744	0 ·687	0 ·590	0 ·163	0 ·840	1 ·564	0 ·972	1 ·562	0 ·407	0 ·407	0 ·186
	average.	6	5	1	7	10	8	9	3	4	2
Table No. 21. Total Admissions.........	186865	17992	25425	12187	15144	19319	26057	11670	22933	23092	13046
,, Deaths................	4725	285	437	300	351	728	600	643	664	377	340
Per centage of Admissions to strength..............	180 ·666	119 ·467	163 ·085	153 ·122	169 ·737	155 ·773	186 ·374	184 ·243	217 ·230	241 ·194	143 ·488
Per centage of deaths to sick treated..	2 ·528	1 ·584	1 ·718	2 ·461	2 ·317	3 ·768	2 ·302	5 ·509	2 ·895	1 ·632	2 ·606
Per centage of deaths to strength................	4 ·568	3 ·159	2 ·803	3 ·769	3 ·934	5 ·870	4 ·291	10 ·151	6 ·289	3 ·937	3 ·739
	average.	2	1	4	5	8	7	10	9	6	3

Amongst the Native troops fever is by far the most prevalent complaint, no less than 2-5ths of the whole admissons having been occasioned by it; and, as will be seen on reference to the table No. 14. for the troops at Cuddapah, the greater proportion occur at that station. In the Cuddapah district generally, fever is the prevailing disease, and the local situation of the cantonment formerly described, may be readily supposed to contribute to its production.

Again, attacks of fever are greatly more numerous amongst the sepoys, than amongst the prisoners in the jail at that station, owing to exposure at night on guard; but the mortality from this disease amongst the sepoys, is very trifling compared with the great number of deaths which occur amongst the prisoners, who are all natives of the district. In the records of the jail it is frequently noted, "that on their (prisoners) first admission into the hospital, especially in those brought from the talook of Goorumcondah,where a bad form of fever is endemic, the sequelae, dropsy and enlarged spleen, are present, the result of repeated attacks," and the great mortality is thus satisfactorily explained.

Next to fever, rheumatism adds most men to the sick list, a complaint which is always common and severe in the Ceded districts.

As it may be interesting to give here a comparative view of the admissions and deaths from cholera amongst the Native troops in the various divisions of the army, in a tabular form, as for the Europeans, the following tables have been framed for the purpose.

From these it is evident that cholera prevails to a greater extent in the Ceded districts, than in any other division of the army; the per centage of admissions, as well as of deaths to strength, being much above the average. It has been frequently observed, that regiments while marching through this division are particularly obnoxious to outbreaks of this disease, and the remarks given at page 72, instance several such epidemic attacks.—The question here arises to what influence are these to be attributed ? and if to a deleterious exhalation emitted from the soil, how is it to be explained, that a regiment shall march over ground from one station to another in a perfectly healthy state, while in another body of men on the same road, after an interval of only three days, cholera shall commit great ravages; instances of this have been witnessed and recorded; while again instances have occurred, where a regiment has been severely attacked with cholera on its march, and another following the same road, after an interval of only two or three days, has altogether escaped.

By the last table it would appear, that as regards the general healthiness of the Native troops, the mortality is above the average in the Ceded districts, especially in the ratio of deaths to sick treated, thus shewing a greater amount of disease of a grave nature, amongst the troops in this division; it will be also seen that the ratio of deaths to strength, is high and in this point of view it stands 8th on the scale.

Table No. 22.	Grand Total.	Ceded Districts.	Mysore.	Cannanore.	Southern Division	Centre "	Presidency.	Northern Division	Hydrabad.	Nagpore.	Tenasserim.
Strength..................	568403	35999	70016	39743	71142	64484	60142	81806	81042	49313	14716
Admissions from Cholera.	5346	655	679	267	965	664	263	892	806	148	7
Deaths from Cholera......	2413	283	262	98	473	287	140	405	377	87	1
Per centage of Admissions to strength..............	0 ·940	1 ·819	0 ·969	0 ·671	1 ·356	1 ·029	0 ·437	1 ·090	0 ·994	0 ·300	0 ·047
Per centage of deaths to sick treated............	45 ·136	43 ·206	38 ·586	36 ·704	49 ·015	43 ·222	53 ·231	45 ·403	46 ·774	58 ·783	14 ·285
Per centage of deaths to strength..............	0 ·424	0 ·786	0 ·374	0 ·246	0 ·664	0 ·445	0 ·232	0 ·495	0 ·465	0 ·176	0 ·006
	average.	10	5	4	9	3	3	8	7	2	1
Table No. 23. Total Admissions.........	347327	17804	46976	22668	42756	31825	25944	72190	46478	30765	9921
., Deaths................	9121	581	991	507	1236	993	661	2122	1207	619	204
Per centage of Admissions to strength............	61 ·105	49 ·456	67 ·093	57 ·036	60 ·099	49 ·353	43 ·137	88 ·245	51 ·351	62 ·387	67 ·416
Per centage of deaths to sick treated..	2 ·626	3 ·263	2 ·109	2 ·236	2 ·890	3 ·120	2 ·547	2 ·939	2 ·596	2 ·012	2 ·056
Per centage of deaths to strength..............	1 ·604	1 ·613	1 ·415	1 ·275	1 ·737	1 ·539	1 ·099	2 ·593	1 ·489	1 ·255	1 ·386
	average.	8	5	3	9	7	1	10	6	2	4

The following tables, No. 24 and 25, exhibit the sickness and mortality which have occurred amongst H. M.'s troops and the H. C.'s European artillery at Bellary separately, the relative healthiness of these two bodies of men, being thus at once seen. The table for H. M.'s troops, comprises a period of ten years, from 1829 to 1838. The return for 1836, included the first quarter of 1837, and that for 1838 the first quarter of 1839, during which months the regiments were not at Bellary; this circumstance however does not vitiate the general results of the table, as no epidemic disease happened, although the number of deaths is considerably above the total exhibited in the general table No. 2; the increase arising from fever, dysentery and hepatitis. The table No. 25, for the European artillery, comprises a period of nine years, from 1833 to 1841 inclusive, when the same body of men occupied the station for six or twelve consecutive months; previous to 1833, separate returns for the detachment were not forwarded to the Medical Board office.

With regard to the greater amount of sickness and mortality amongst the artillery, compared with H. M.'s troops at this station, and which is in both points, at variance with the experience at all other stations, the following extracts from the staff surgeon's reports dated 1837, will throw some light. "The number of individuals who have been admitted more than once during the six months, amount in H. M.'s 41st regiment, to 17 admitted twice, and 6 admitted three times; while in the artillery, 18 have been admitted twice, 7, three times, 4, four times, 3, five times, and 1, seven times; so that of the admissions, amounting to 129 in the artillery, 95 are composed of, or have been occasioned by 33 individuals. There are many habitual drunkards amongst this body of men, who are frequently in hospital, and it may be mentioned, that this company has been stationed here, detached from head quarters, upwards of eleven years." Dated 1st July, 1837.

"The number of admissions into hospital in the detachment of artillery, arising from intemperance, is truly melancholy, and two of the deaths may be directly ascribed to this cause.—32 cases of ebrietas, 4 of delirium tremens, 14 diarrhœa, and 10 under the head cephalalgia, total 60, resulting solely from hard drinking, have been admitted into hospital." Dated 31st December, 1837.

Table No. 24 and 25.	H. M.'s regiments. *Aggregate Strength*, 7954. From 1829 to 1838 inclusive.				H. C. Artillery. *Aggregate Strength*, 864.[illegible] From 1833 to 1841 inclusive.			
	Admitted.	Died.	Per centage of sick to strength.	Per centage of deaths to sick.	Admitted.	Died.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers	3532	44	44 ·405	1 ·245	412	0	47 ·684	0 ·000
Cholera	*154	61	1 ·936	39 ·610	25	+18	2 ·893	72 ·000
Diarrhœa	636	7	7 ·995	1 ·100	148	3	17 ·129	2 ·027
Dysenteria acuta.	1200	72	15 ·086	6 ·000	70	1	8 ·101	1 ·428
,, Chronica.	68	3	0 ·854	4 ·411	7	2	0 ·810	28 ·571
Hepatitis acuta	680	35	8 ·549	5 ·147	87	6	10 ·069	6 ·896
,, Chronica	131	9	1 ·646	6 ·870	31	1	3 ·587	3 ·225
Catarrhus	389	3	4 ·890	0 ·771	60	0	6 ·944	0 ·000
Hœmoptysis	11	1	0 ·138	9 ·090	1	0	0 ·115	0 ·000
Asthma	37	2	0 ·465	5 ·405	0	0	0 ·000	0 ·000
Phthisis	41	17	0 ·515	41 ·463	3	1	0 ·347	33 ·333
Pneumonia	171	8	2 ·149	4 ·678	19	1	2 ·199	5 ·263
Apoplexia	6	5	0 ·075	83 ·333	5	5	0 ·578	100 ·000
Epilepsia	21	1	0 ·264	4 ·761	3	0	0 ·347	0 ·000
Paralysis	28	6	0 ·352	1 ·428	2	0	0 ·231	0 ·000
Amentia	3	1	0 ·037	33 ·333	0	0	0 ·000	0 ·000
Mania	18	3	0 ·226	16 ·666	4	1	0 ·462	25 ·000
Ebrietas	91	1	1 ·144	1 ·098	207	0	23 ·958	0 ·000
Delirium Tremens	179	2	2 ·250	1 ·117	37	1	4 ·282	2 ·702
Anasarca	13	2	0 ·163	15 ·384	0	0	0 ·000	0 ·000
Ascites	12	4	0 ·150	33 ·332	0	0	0 ·000	0 ·000
Rheumatismus acutus	830	1	10 ·435	0 ·120	94	0	10 ·879	0 ·000
,, Chronicus	315	0	3 ·960	0 ·000	79	1	9 ·143	1 ·265
Syphilis &c	2694	3	33 ·868	0 ·111	370	1	42 ·824	0 ·270
Morbi oculorum	2022	0	25 ·421	0 ·000	73	0	8 ·449	0 ·000
,, Cutis	106	0	1 ·332	0 ·000	0	0	0 ·000	0 ·000
Other diseases.	3411	18	42 ·884	0 ·527	566	3	65 ·509	0 ·530
Total	16799	309	211 ·201	1 ·837	2303	45	266 ·550	11·953

* Cholera prevailed as an epidemic in 1833 and 1837, and a few cases occurred in 1831, 32 and 1838.

+ Cholera was epidemic in 1839 when 12 deaths occurred.

Per centage of deaths to strength 3·884.
Do. excluding cholera 3·117.
H. M.'s troops.

Per centage of deaths to strength 5·208.
Do excluding cholera 3.125.
H. C. troops.

CEDED DISTRICTS.

No. 26.—*Table exhibiting the sickness and mortality amongst the OFFICERS of H. M.'s regiments at Bellary, during a period of ten years, from* 1829 *to* 1838 *inclusive.*

Aggregate strength. 308. CLASSES.	DISEASES.	Admissions.	Deaths.	Totaladmissions from each class.	Totol deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers......	Febris intermit quot..........	11	0	127	5	41 ·234	3 ·936
	,, remittens	11	1				
	,, com : cont....	105	4				
	Cholera........	11	6	11	6	3 ·571	54 ·545
Diseases of the abdominal viscera......	Diarrhœa......	52	0	141	0	45 ·779	0 ·000
	Dysenteria.....	27	0				
	Enteritis.	1	0				
	Obstipatio......	6	0				
	Hœmorrhois. ..	2	0				
	Dyspepsia......	16	0				
	Gastritis.	1	0				
	Splenitis.	2	0				
	Hepatitis.......	34	0				
Diseases of the luugs.	Catarrhus......	11	0	13	2	4 ·220	15 ·384
	Phthisis pulmonalis..........	2	2				
Diseases of the brain.	Apoplexia......	2	1	5	1	1 ·623	20 ·000
	Mania..........	2	0				
	Delirium Tremens.........	1	0				
Eruptive fevers......	Variola.........	3	1	4	1	1 ·298	25 ·000
	Erysipelas......	1	0				
	Anasarca.......	1	0	1	0	0 ·324	0 ·000
	Rheumatismus.	16	0	16	0	5 .194	0 ·000
Venereal affections ..	Syphilis primitiva..........	4	0	20	0	6 ·493	0 ·000
	,, consecutiva..	1	0				
	Gonorrhœa.... ..	12	0				
	Hernia humoralis............	3	0				
	Morbi oculorum	13	0	12	0	4 ·220	0 ·000
	,, Cutis.....	8	0	8	0	2 ·597	0 ·000
	Other diseases..	143	0	143	0	46 ·428	0 ·000
	Total......	502	15	402	15	162 ·987	2 ·988

NOTE.—Per centage of deaths to strength 4·870

CEDED DISTRICTS.

No. 27.—*Table exhibiting the sickness and mortality amongst the WOMEN of H. M.'s regiment at Bellary, during the same period of ten years, from* 1829 *to* 1838 *inclusive.*

Aggregate strength. 1021.		Admissions.	Deaths.	Total admissions from each class.	Total deaths from each class.	Per centage of sick to strength	Per centage of deaths to sick.
CLASSES.	DISEASES.						
Fevers	Febris intermit quot.	35	0	464	6	45 ·445	1 ·293
	,, remittens.	9	0				
	,, com : cont.	420	6				
	Cholera	25	11	25	11	2 ·448	44 ·000
Diseases of the abdominal viscera	Diarrhœa	59	2	213	13	20 ·861	6 ·103
	Dysenteria.	80	7				
	Enteritis.	6	1				
	Colica	16	0				
	Dyspepsia	6	0				
	Obstipatio.	7	0				
	Hœmorrhois	6	0				
	Splenitis.	2	0				
	Peritonitis.	3	1				
	Hepatitis	28	2				
Diseases of the lungs	Catarrhus	21	0	34	2	3 ·330	5 ·882
	Hœmoptysis.	1	0				
	Asthma	8	0				
	Phthisis pulmonalis	4	2				
Diseases of the brain.	Apoplexia	1	0	9	0	0 ·881	0 ·000
	Epilepsia	4	0				
	Paralysis	1	0				
	Hysteria.	3	0				
Eruptive fevers	Variola	3	0	6	0	0 ·587	0 ·000
	Varicella	2	0				
	Erysipelas	1	0				
	Anasarca	7	2	7	2	0 ·685	28 ·571
	Rheumatismus	19	0	19	0	1 ·860	0 ·000
Peculiar diseases	Menorrhagia.	1	0	72	2	7 ·051	2 ·777
	Parturitio	69	0				
	Febris puerp.	2	2				
	Morbi oculorum	171	0	171	0	16 ·758	0 ·000
	,, cutis	2	0	2	0	0 ·195	0 ·000
	Other diseases	164	2	164	2	16 ·062	1 ·219
	Tota	1186	38	1186	38	116 ·160	3 ·204

Note.—Per centage of deaths to strength 3·721

CEDED DISTRICTS.

No. 28.—*Table exhibiting the sickness and mortality amongst the CHILDREN of H. M.'s regiments at Bellary, during the same period of ten years, from* 1829 *to* 1838 *inclusive.*

Aggregate strength. 1704. CLASSES.	DISEASES.	Admissions.	Deaths.	Totaladmissions from each class.	Total deaths from each class.	Per centage of sick to strength.	Per centage of deaths to sick.
Fevers	Febris intermit quot.	146	4	770	31	45 ·187	4 ·025
	„ remittens	9	3				
	„ com: continua	615	24				
	Cholera	27	15	27	15	1 ·584	55 ·555
Diseases of the abdominal viscera	Diarrhœa	91	15	203	38	11 ·913	18 ·719
	Dysenteria.	87	17				
	Enteritis	3	3				
	Obstipatio.	4	0				
	Colica	4	0				
	Marasmus.	1	1				
	Hepatitis.	13	2				
Diseases of the Lungs	Cynanche	4	2	22	6	1 ·291	27 ·272
	Catarrhus	17	3				
	Pneumonia.	1	1				
Diseases of the Brain.	Convulsio.	7	6	14	8	0 ·820	57 ·142
	Epilepsia.	4	0				
	Hydrocephalus.	1	1				
	Tetanus	1	0				
	Chorea.	1	1				
Eruptive fevers.	Variola	21	3	34	5	1 ·995	14 ·705
	Varicella	9	0				
	Rubeola	1	0				
	Erysipelas.	3	2				
	Dentitio	6	2	35	2	2 ·054	5 ·714
	Vermes	29	0				
	Morbi oculorum	915	0	915	0	53 ·697	0 ·000
	„ cutis	22	0	22	0	1 ·291	0 ·000
	Other diseases	175	7	175	7	10 ·269	4 ·000
	Total	2217	112	2217	112	130 ·105	5 ·051

NOTE.—Per centage of deaths to strength 6·572.

CEDED DISTRICTS.

Table shewing the Number of Persons successfully vaccinated from 1829 *to* 1838 *inclusive.*

DISTRICT OR STATIONS.	Class and sex of Patients.						Total Vaccinated.	
	Christians.		Hindoos.		Mahomedans.			
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Bellary........................	1,061	875	7,344	6,589	1,477	1,087	9,882	8,551
Cuddapah....................	456	397	7,436	6,394	1,459	1,223	9,351	8,014
Grand Total..	1,517	1,272	14,780	12,983	2,936	2,310	19,233	16,565

Number of Vaccinators in each District.

	1st Class Vaccinators.	2nd Class Vaccinators.
Bellary........................	1	3
Cuddapah....................	1	3
Total....	2	6

The number vaccinated in this division during these ten years is 35,798; the whole expense incurred, amounts to Rupees 19,488 which gives an average of about Rupees 54, 8, per hundred, or 13 pence per head in English money.

APPENDIX.

Statement shewing the extent of accommodation, Dietary, Allowances for Clothing, Hours of Labour &c. in the Jails throughout the Ceded Districts.

JAIL OF	Number of prisoners the prison is capable of containing in separate sleeping cells.	Number of prisoners the prison is capable of containing where more than one prisoner sleeps in one cell.	Dietary or other weekly allowance and weekly cost per head.	Allowance of clothing and bedding and cost per head.	Description of employment and hard labour.	Hours of labour and of exercise.
BELLARY.	The Jail is not constructed on the principle of affording separate sleeping cells to the Prisoners. There are about 43 cells in all in the Jail.	The cells set apart for the native convicts are calculated to contain 596 at the rate of 2 feet in breadth, and 7 in length for each man; in addition to the above, a European prisoner has 1 room 14 feet square to himself, 26 female prisoners have two, two similar rooms, and 15 civil prisoners or debtors, have 3 rooms of the same size, in separate parts of the Jail.	Each prisoner is allowed 1 seer or 2 ℔ weight of cholum, the great millet or cumboo, or Raywat, or of Natcheny, at his option; or he may take half of his allowance in one grain, and half in another, and change the description of grain as often as he pleases. The grain is issued in the husk, and the prisoners beat, clean and cook it themselves after they return from work. Each prisoner is allowed weekly. 7 seers of gawaree......... ... 0 2 4 To purchase firewood chilleys, tamarind salt &c. 0 2 4 Total per hd. Rs. 0 4 8	The annual allowance of clothing and bedding is as follows. 1 Cumbly.......................... 0 12 0 2 Pieces of cloth, 5 cubits each.................. 0 8 0 Total Rupees.. 1 4 0	On public roads, bridges &c. spinning, cotton, and woollen thread, and weaving cloths and cumblies.	From 6 to 10 A. M. and from ¼ before 11 to 4 P. M. The convicts leave the jail at 6 A. M. and give over work at 3 P. M. or soon after, according to distance, to enable them to reach the jail at 4 P. M.
CUDDAPAH.	The prisoners are kept in separate wards not in separate cells.	600.	The weekly cost of food per head is Ans. 3 and pice 6 prisoners employed at paid labour receive 80 Rs. weight of soaree per diem; those waiting trial receive 70 Rupees weight, of those in hospital 30 Rs. weight each prisoner also receives 4 pice to purchase firewood and condiments.	The prisoners are allowed each 1 cumbly a year, and ⅓ of a piece of coarse cloth every 6 months, the price of the cumbly is generally 6 Annas, and ⅓ of a piece of cloth, costs 4 Annas 8 pice.	The prisoners are chiefly employed in repairing roads, and making paper.	The hours of labour are from 7 A. M. to 12. and from 1 P. M. to 5. This includes the time in walking to and from the spot, at which their labour may be required, the intermediate hour of rest is taken at the place of labour.

Meteorological Observations, made at Bellary in 1841 *and* 1842.

	Barometer.			Thermometer.				Amount of rain.	Number of days on which rain has fallen.	Prevailing Winds.	
	Meam Maxim.	Meam Mimim.	General Mean.	Mean Maxim.	Mean Minim.	General Mean.	Mean daily rang.	Inches.	Days.	A. M.	P. M.
January 1841	28 ·70	28 ·66	28 ·68	84 ·2	73 ·6	78 ·9	10 ·5	0	0	S. E.	E.
February ,,	28 ·72	28 ·68	28 ·70	86 ·8	74 ·7	80 ·8	12 ·03	0·02	1	S. E.	E.
March ,,	28 ·63	28 ·58	28 ·60	92	83	87	9	0·03	2	N. W.	N. W.
April ,,	28 ·62	28 ·56	28 ·59	94 ·2	86 ·2	90 ·2	8	4·19	8	N. W.	N. W. to E.
May ,,	28 ·57	28 ·50	28 ·53	92 ·5	83 ·9	88 ·2	8 ·6	·09	4	N. W.	N. W.
June ,,	28 ·49	28 ·43	28 ·46	88	81 ·7	84 ·9	6 ·3	4·40	12	W.	W.
July ,,	28 ·48	28 ·43	28 ·45	85 ·7	81 ·0	83 ·3	4 ·6	1·17	10	W.	W. S. W.
August ,,	28 ·56	28 ·49	28 .52	83	79	81 ·5	4 ·3	6·10	14	W.	W.
September ,,	28 ·53	28 ·47	28 ·50	83 ·8	78 ·5	81 ·2	5 ·2	4·61	11	N. W.	N. W.
October ,,	28 ·66	28 ·55	28 ·60	83 ·5	77 ·6	80 ·5	5 ·9	5·38	14	N. W.	N. E.
November ,,	28 ·64	28 ·59	28 ·61	82 ·7	75	78 ·8	7 ·7	0·39	5	S. E.	E.
December ,,	28 ·65	28 ·59	28 ·62	81 ·8	73 ·1	77 ·3	8 ·7	0·02	2	N. W.	N. E.
January 1842	28 ·71	28 ·67	28 ·69	84 ·4	74 ·1	79 ·2	10 ·2	0·7	2	S. E.	E.
February ,,	28 ·69	28 ·63	28 ·66	88 ·5	76 ·9	82 ·7	11 ·6	0	0	S. E.	E.
March ,,	28 ·68	28 ·60	28 ·64	90 ·7	81 ·5	86 ·9	9 ·2	0	0	S. E.	S. E. Variable.
April ,,	28 ·63	28 ·56	28 ·59	98 ·9	86 ·6	92 ·1	12 ·2	0·2	2	N. W.	N. W.
May ,,	28 ·58	28 ·51	28 ·54	92 ·8	82 ·7	87 ·7	10 ·1	1·89	6	from S.W. to N.W.	from S. W. to N.W.
June ,,	28 ·51	28 ·47	28 ·49	86 ·8	80 ·1	83 ·4	6 ·6	2·75	10	N. W.	N. W.
July ,,	28 ·54	28 ·49	28 ·51	85	79	82 ·0	6 ·1	0·60	7	W.	S. W.
August ,,	28 ·55	28 ·51	28 ·53	84 ·1	77 ·5	80 ·8	6 ·6	1·74	16	W.	W.
September ,,	28 ·59	28 53	28 ·56	83 ·3	78 ·0	80 ·6	5 ·2	8·44	7	N. W.	N. W.
October ,,	28 ·68	28 ·62	28 ·65	84 ·1	78 ·8	81 ·5	5 ·3	2·21	8	N. W.	N. E. Variable.
November ,,	28 ·73	28 ·72	28 ·72	82 ·8	76 ·2	79 ·5	6 ·6	8	5	S. E.	E.
December ,,	28 ·79	28 ·76	28 ·77	81 ·5	73 ·6	77 ·5	7 ·8	0	0	E.	E.

Statistical table for the district of Bellary, for the year 1836.

NAMES OF TALOOKS.	Extent and Population.								
	Extent in square miles.	Number of Samuts.	Do. of Mozahs.	Do. of Muzrahs.	Total of villages, and Hamlets.	Total number of fields as registered at the survey.	Number of houses.	Do. of families.	Total of persons.
1	2	3	4	5	6	7	8	9	10
Adwarie..........................	924	18	214	43	257	41286	22139	23521	105882
Goolem..........................	720	6	106	6	112	17713	9524	10133	45081
Panchapollem..................	1200	15	196	124	320	46795	20936	21718	95036
Gooty..............................	920	14	127	91	218	27985	16381	17720	79873
Yadakee...........................	380	10	66	97	163	24084	10543	11562	57001
Raidroog..........................	1012	20	167	75	242	24791	14475	15138	67287
Tadputtree........................	448	4	75	94	169	26575	10949	12431	61710
Aruntapoor........................	792	11	125	162	287	33095	15189	16623	75730
Pengondah........................	660	8	127	233	360	37430	15096	15743	68330
Kodecondah.......................	396	6	98	282	380	32164	10514	11036	50638
Muddugserah......................	450	13	159	171	330	17033	11537	11792	52306
Druwaverum.......................	1300	16	196	172	368	33938	16957	18066	83470
Bellary..............................	936	10	168	15	183	25769	19967	20881	89352
Kumplee............................	330	10	99	36	135	13651	9062	9287	33249
Hurpumphully....................	840	13	245	14	259	34345	12334	12472	45949
Kodleghee........................	1028	17	413	36	449	44122	18072	18313	70791
Howinhudgaty....................	720	12	177	44	221	24662	12592	12757	48223
Total........	13056	203	2758	1695	4453	505438	246267	259198	1129907

Statistical table continued.

Number and description of Villages.

		Fusly 1245. A. D. 1835.			Fusly 1246. A. D. 1836.		
		Mozahs.	Muzrahs.	Total.	Mozahs.	Muzrahs.	Total.
Aumaine	Government village..	2416	1656	4072	2421	1655	4076
	Resumed Jogheer....	9	3	12	9	3	12
	Shrotriums...........	162	17	179	162	17	179
	Total.........	2587	1676	4263	2592	1675	4267
Fixed Jodee..............		22	2	24	22	2	24
Rented....................		0	0	0	0	0	0
Permanently settled......		0	0	0	0	0	0
Surva Maunium...........		53	17	70	53	17	70
		75	19	94	75	19	94
Pesheush.................		2662	1695	4357	2667	1694	4361
		0	0	0	0	0	0
Total........		2662	1695	4357	2667	1694	4361

Sources of Irrigation.

	Fusly 1246 A. D. 1836.		
	In repair.	Out of repair.	Total.
Cultivation Tanks.........	1218	153	1401
Channels from Rivers.....	235	29	264
Do. Do. Springs....	1493	253	1746
Wells for Circar land.....	14992	2633	17625
Emaum Wells..............	4815	0	4815
Dams across Rivers.......	45	1	46
Do. Do. lesser streams.	238	47	285
Totol.......	23066	3116	26182

Number of Cultivators and Puttahs.

	Fusly 1245 A. D. 1836.		
	Ryots.	Puttahs	Ploughs
Stala Ryots..................	68819	68819	82234
Payakaries...................	10812	10812	
Total holders of individual puttahs............	79631	79631	
Goonchee....................	0	5409	
Total.......	79631	85040	82234

Population ascertained in Fusly 1242.

Number of Houses.	Number of Families.	Total of Persons.		
		Males.	Females.	Total.
246.257	259.198	591.290	538.617	11.29.907

Cattle and Sheep.

	Total.......	Detail.	
		Belonging to Cultivators	Belonging to other persons.
Cows.........................	250058	375360	415732
Bullocks......................	282858		
She Buffoloes.	201293		
He Do.	56883		
Sheep and Goats............	1205657	674117	531540
Total.........	19.967.49	1049477	917272

Statement of the Cultivation.

		Acres.		
		A.	L.	A.
Total dry Garden & Wet.	Dry Land..........	1815069	27	3
	Garden Land.......	35840	14	3
	Wet Land..........	115873	38	8
	Total.......	1964783	38	14

Statistical table, Cuddapah Districts for 1836.

Divisions.	Names of the Talooks.	Wet						Capable of cultivation.					
		Circar land.			Enam land.			Total Circar, Dry Garden, Wet Poonasa & Turry Bagayet.			Enam dry, Garden, wet Poonasa and Turry Bagyyet.		
Principal Collectors.	Jummulmudgoo........	58722	12	5	33505	1	8	297329	12	5	152018	12	0
	Doo,oor...............	50308	11	11	39557	1	9	293025	3	7	188660	9	5
	Kovelakoontha.........	36993	8	11	33608	1	11	295913	1	11	184381	9	7
	Chitwail...............	111461	13	10	95960	15	8	352332	5	10	182121	3	9
	Sidhout................	58182	12	7	29676	11	3	266952	3	5	75583	4	0
	Chennoor...	55636	14	4	34665	4	8	184248	12	6	101634	4	10
	Kamalapoor............	56912	6	2	34576	7	1	192137	7	10	99519	3	3
	Goorrumcondah........	184569	14	2	143584	4	7	345169	14	0	180295	5	9
	Muddenpully...........	137673	0	2	80102	4	8	273609	7	9	114755	4	7
	Poolevendlah...........	138452	4	2	61273	9	10	461866	13	5	150182	8	9
	Roychoty..............	126750	7	8	90019	9	15	313620	1	8	137291	0	2
	Total...	1015664	10	4	676719	8	6	3276205	4	4	1566443	6	1
Sub-Collectors,	Cumbum...............	67316	15	1	49182	6	0	285907	1	5	171306	12	3
	Doopaud...............	34632	14	5	26012	8	6	417130	1	9	157608	7	8
	Budwaib...............	67951	6	2	64238	14	7	267226	1	10	117617	2	0
	Total...	169902	3	8	139433	13	1	970233	5	0	446532	5	11
	Grand Total	1185566	14	0	816163	5	7	4246468	9	4	2012975	12	0
	Poonganoor...........	117242	15	11	109755	1	1	317532	2	10	206122	12	8
	Bunganpully....	0	0	0	0	0	0	0	0	0	0	0	0
	Grand total including Pooganoor and Bunganapully.........	1302809	13	11	925918	6	8	4564000	12	2	2219098	8	8

Statistical table of the Cuddapah District, for the year 1836.

	Number of the Villages. Mowzahs.	Muzzrahs	Total.
Aumanie. Govt. Villages..	1594	8348	9942
Aumanie. Anna Shrotrium	123	259	382
Total..	1717	8607	10324
Fixed Jodie................	69	214	283
Jodie........................	3	1	4
Rented.......................	0	0	0
Permanently settled........	0	0	0
Jagheer and Surva Mauniums................	21	65	86
Moturpha..................	2	0	2
Total..	95	280	375
do...	1812	8887	10699
Paishcush..................	0	0	0
Grand Total	1812	8887	10699
Particuiars of the above total			
Total of 14 Talooks.........	1744	8191	9935
Paishcush of Poonganor....	68	696	764
Total..	1812	8887	10699
Aumanie of Banganpully Jagheer...............	58	14	72
Grand Total..	1870	8901	10771

Sources of Irrigation.	In Repair.	Out of Repair.	Total.
Tanks......................	7340	1290	863
Channels as follows			
do from Pernah river...	14	5	1
do Papugin.	84	12	9
do Gondikah......	3	0	3
do Bahoodah......	137	34	171
do Sagara	5	1	6
do Chittravahti...	14	0	14
do Paularoo......	4	0	4
do Jumpala	4	0	4
do Coomoodrooty.	1	0	1
do Jooroonady....	0	1	1
do Pinchanuddy..	77	29	106
do Maundivya neddy	76	13	89
do Kowndaniah..	6	0	6
do Arjoonah......	23	3	26
do Gargaya......	1	0	
Total..	449	9	547
Channels from Springs...	927	134	106
	1376	232	160
Wells....................	56241	7869	6411
Annicut..................	98	29	127
Total...	65055	9420	71475

POPULATION.

Number of Houses.	Persons. Male.	Female.	Total.
2,21,248	5,67,228	5,14,033	10,81 261

	Number of Cultivators and Puttahs. Ryots.	Puttahs	Ploughs
Stullah ryots......	92840	91815	74776½
Payakaries........	17921	17857	0
Gonchee..........	0	1279	0
	110761	110951	74776½
Jodee ryots........	13322	1229	0
Grand Total..	124083	112280	74776½

DETAIL.

Cattle and Sheep	Total.	Belonging to the Cultivators.	Belonging to others.
Cows.	1,81,704	1,39,93	41,773
Bullocks	2,19,233	1,80,070	39,163
She Buffaloes....	1,35,023	1,04,382	30,641
He ——,,——....	24.122	17,11	7,009
Sheep and Goats.	7,94,732	5,28,257	2,66,475
Total	13,54,81	9,69,753	3,85,061